

## Operation Manual

**ENGLISH**

DVD Map - USA / Canada

# CNDV-50MT CNDV-50MTP

This operation manual can be used with the following models:

**AVIC-880DVD, AVIC-88DVD, AVIC-80DVD,  
AVIC-90DVD, AVIC-9DVD**

### **READ ME FIRST!**

To Users Updating the Application Program

**You need an AV Head Unit or Display with touch panel capability to use this software.**

**Make sure to use a display suitable for this system.**

Please read the cautions on the next page before using the CNDV-50MT [CNDV-50MTP] disc as there is a possible risk that the stored user-registered data may lost upon completion of the update. Please be aware that the manufacturer cannot take any responsibility for lost data in the event the data is lost.

Upgrading to the newer version → page 57

### **Notice to all users:**

This software requires that the navigation unit be properly connected to your vehicle's parking brake. If not properly connected and depending on your vehicle, additional installation may be required. For more information, please contact your Authorized Pioneer Electronics retailer or call us at (800)421-1404.

## **Cautions on Updating the Application Program of the Navigation System:**

- Stop the vehicle in a safe location. While the program update is in progress, ensure that the power supply of the Navigation System is not turned off.
- When the update procedure is complete, the Navigation System will be restarted. After the system has started up again, make sure not to turn off the power supply for the Navigation System until the map of your surroundings appears.
- During the update process, there is the possible risk of the “Address Book”(\*) data and the “Destination History” data being lost. It is highly recommended to use a PC Card (PCMCIA TYPE II <5 V>) to back up Address Book data. (Since the “Destination History” cannot be stored on a PC Card directly, to keep the “Destination History” data, first store it in the Address Book, then onto the PC Card.)

\*“Address Book” data includes “Return Home” and “Go to” contents.

- Any existing calculated routes will be canceled.
- Personalized settings will return to their factory settings.

## **Application Program Update Procedure**

Refer to the update procedure in the “Installing the Program” section (P.57) of this manual.

The screen shown in the example may differ from the actual screen.  
The actual screen may be changed without notice for performance and function improvements.

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- If the local traffic regulations or conditions deviate from this data, follow the local traffic regulations (such as signs, indications, etc.) and conditions (such as construction, weather, etc.).
- The traffic regulation data used in the map database applies only to standard sized passenger vehicles. Note that regulations for larger vehicles, motorbikes, and other non-standard vehicles are not included in the database.

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## Important Safety Information

Before using your Navigation System, be sure to read and fully understand the following safety information:

- Read the entire manual before operating this Navigation System.
  - The navigation features are intended solely as an aid to you in the operation of your vehicle. It is not a substitute for your attentiveness, judgment, and care when driving.
  - Do not operate this Navigation System if doing so in any way will divert your attention from the safe operation of your vehicle. Always observe safe driving rules and follow all existing traffic regulations. If you experience difficulty in operating the system or reading the display, park your vehicle in a safe location and apply the parking brake before making the necessary adjustments.
  - Never allow others to use the system unless they have read and understood the operating instructions.
  - Never use this Navigation System to route to hospitals, police stations, or similar facilities in an emergency. Please call 911.
  - Route and guidance information displayed by this equipment is for reference purposes only. It may not accurately reflect the latest permissible routes, road conditions, one way streets, road closures, or traffic restrictions.
  - Traffic restrictions and advisories currently in force should always take precedence over guidance given by the navigation system. Always obey current traffic restrictions, even if the navigation system provides contrary advice.
  - Failure to input correct information about the local time may result in the navigation system providing improper routing and guidance instructions.
  - Never set the volume of your Navigation System so high that you cannot hear outside traffic and emergency vehicles.
  - To promote safety, certain functions are disabled unless the parking brake is applied.
- The data encoded in the disc is the intellectual property of the provider, and the provider is responsible for such content.
  - Keep this manual handy as a reference for operating procedures and safety information.
  - Pay close attention to all warnings in this manual and follow the instructions carefully.
  - Do not install the display where it may (i) obstruct the driver's vision, (ii) impair the performance of any of the vehicle's operating systems or safety features, including air bags, hazard lamp buttons or (iii) impair the driver's ability to safely operate the vehicle.
  - Please remember to wear your seat belt at all times while operating your vehicle. If you are ever in an accident, your injuries can be considerably more severe if your seat belt is not properly buckled.
  - Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.
  - Never use headphones while driving.



### WARNING

- Do not attempt to install or service your display by yourself. Installation or servicing of the display by persons without training and experience in electronic equipment and automotive accessories may be dangerous and could expose you to the risk of electric shock or other hazards.

## Notes Before Using the System and Additional Safety Information

### Available models

This software can be used with the following models:  
AVIC-9DVD, AVIC-90DVD, AVIC-80DVD, AVIC-88DVD, AVIC-880DVD

- ▷ If the program has not been updated → "Installing the Program" on page 57

### Failure to Operate

Should the navigation system fail to operate properly, contact your dealer or the nearest authorized Pioneer service facility.

### After-sales service for Pioneer products

Please contact the dealer or distributor from where you purchased the product for its after-sales service (including warranty conditions) or any other information. In case the necessary information is not available, please contact the companies listed below:

Please do not ship your product to the companies at the addresses listed below for repair without making advance contact.

#### U.S.A

Pioneer Electronics  
(USA) Inc.  
CUSTOMER SUP-  
PORT DIVISION  
P.O. Box 1760  
Long Beach, CA  
90801-1760  
800 421-1404

#### CANADA

Pioneer Electronics of  
Canada, Inc.  
CUSTOMER  
SATISFACTION  
DEPARTMENT  
300 Allstate Parkway  
Markham, Ontario  
L3R OP2  
1-877-283-5901

For warranty information, please see the Limited Warranty sheet included with your product.

### Product registration

Visit us at the following site:

<http://www.pioneer-electronics.com>

1. Register your product. We will keep the details of your purchase on file to help you refer to this information in the event of an insurance claim such as loss or theft.
2. Receive updates on the latest products and technologies.
3. Download owner's manuals, order product catalogs, research new products, and much more.
4. Receive notices of software upgrades and software updates.

### Precaution

#### Parking brake interlock

Certain functions offered by this Navigation System could be dangerous if used while driving. To prevent them being used while in motion, there is an interlock with your vehicle's parking brake. If you attempt to use these functions during driving, their onscreen touch keys may be indicated in gray and inoperable. If so, stop in a safe place, apply the parking brake, then operate.

#### To ensure safe driving

##### **WARNING**

- **To avoid the risk of accident and the potential violation of applicable laws, the navigation system is not for use with a video screen (DVD video, TV, etc.) that is visible to the driver.**
- **In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.**

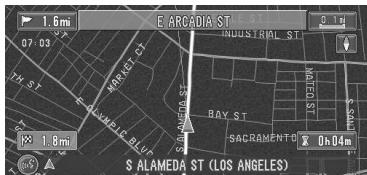
Before viewing the DVD video using the navigation unit's built-in DVD player, first stop the vehicle in a safe place and apply the parking brake. The display is controlled in combination with the brake to prevent the display of the video unless the parking brake is applied.

### Purchasing Software Upgrade

Using the most current map DVDs will allow for most accurate destination mapping. Upgrade DVDs are available for purchase through your local Pioneer dealer.

To watch a DVD or TV, park your vehicle in a safe place and apply the parking brake.

## Color difference of the map display between day and night



Night display

The examples in this manual are illustrated using the daytime display. When driving at night, the colors you see may differ from those shown.

To use this function, the Orange/white lead of the navigation unit must be connected correctly.

- "Day/Night Display" → Page 50

## About playing the DVD video

DVD videos and CDs can be played on AVIC-9DVD, AVIC-90DVD. When using AVIC-9DVD, refer to the DVD section in the "Operation Manual" provided with AVIC-9DVD. When using AVIC-90DVD, refer to the DVD section in their respective "Hardware Manual".

## About the AV Head Unit or Display to be Connected

**You need an AV head Unit or Display with a touch panel capability to use this software.** If any display without a touch panel feature is connected, the software will not work properly. Make sure to use a display suitable for the system.

- "About AV Head Units /Displays to be Connected" → Page 59

## Features (Characteristics of this software)

### Touch panel key operation

It is possible to operate the navigation function and the Audio function by using touch panel key.

### Compatible with the Voice Recognition System

Using the microphone will enable voice operation for both the navigation and AV functions\*.

\*: You need a display with AV function.

### Variety of View Modes

Various types of screen display can be selected for navigation guidance.

- Map View, Driver's View, Route View, Guide View

### Wide Variety of POI Information

Approximately 11 million POIs are included in this database as of January 2004.

- Some POI information may not be accurate or may become inaccurate through the passage of time. Please directly contact the POI to verify the accuracy of the information about the POI which appears in this database. POI information is subject to change without notice.

### Auto Reroute Function

If you deviate from the set route, the system will re-calculate the route from that point so that you remain on track to the destination.

- This function may not work for certain areas.

### Assign an Original Image as a Background Image

You can store your own pictures on a PC card in JPEG format and import original images in this format. These imported images can be set as a background image.

- Imported original images will be stored in the memory, but saving cannot be guaranteed completely. If original image data is deleted, set the PC card again and re-import the original image.

# **Manual Overview**

---

This manual provides the important information you need to make full use of your new Navigation System. The beginning sections outline the Navigation System and describe its basic operation. The later sections describe the details of the navigation functions.

Please note that when you have decided what you want to do, you can find the page you need from the **"Table of Contents"**.

If you want to check the meaning of each item displayed on the screen, you will find the necessary page from the **"Display Information"** at the end of the manual.

## **To users updating the application program**

Before using this system, check that the program has been updated. If not, upgrade it by referring to "Installing the Program" on page 57.

## **How to use this manual**

For reasons of safety, it is particularly important that you fully understand your Navigation System before using it. Be sure to read Introduction and Chapter 1 in particular.

**1**

### **Basic Operation**

**If you want to use the Navigation System immediately, please read this section. It will explain the basics of operating this system, including items appearing on the display and how to use the different menus.**

**2**

### **Setting a Route to Your Destination**

This section describes various ways of searching the destination, changing the route search conditions, and the route operation during route guidance.

**3**

### **Editing the Navigation Utilities**

Describes convenient functions for navigation, including how to organize information on places you have visited and how to store data on the PC card.

**4**

### **Customizing Your Navigation System**

The behavior of your Navigation System depends on a number of settings. If you need to change any of the initial settings (default settings), read the relevant section of this chapter.

**5**

### **Operating Your Navigation System with Voice**

Describes navigation operations such as searching the destination and performing audio operations by voice.

### **Appendix**

Read the appendix to learn more about your Navigation System and such information as the availability of after-care. Please see "**Display Information**" at the end of this manual for checking the details of each item on the menu.

## Terminology

Before moving on, take a few minutes to read the following information about the conventions used in this manual. Familiarity with these conventions will help you greatly as you learn how to use your new equipment.

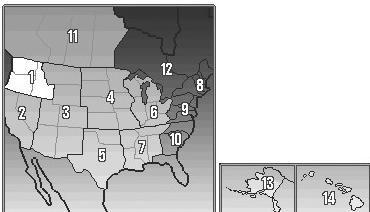
- Buttons on your Navigation Unit are described in **ALL CAPITAL, BOLD** lettering:  
e.g.)  **NAVI (or POS)** button, **NAVI MENU** button.
- Items in the different menus or touch keys available on the screen are described in quotations ("") and bold:  
e.g.)  "**Destination**", "**Settings**".
- Extra information, alternative use and other notes are presented like this:  
e.g.)  After removing the disc from the slot, keep it in the case.
- The references are indicated like this:  
e.g.)  Setting the Route Options → Page 32

## Map Discs for Navigation System

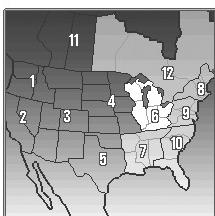
### Configuration of data recorded on discs

The map for this navigation system is supplied on two discs: one for the west and the other for the east. Please set the disc to use according to your destination or current location.

The areas recorded on each disc are as follows:



**West area disc**



**East area disc**

- Removing the disc and inserting another disc causes the navigation system to automatically restart and reload the new route. (This automatic "Reroute" operation cannot be canceled.)



# Basic Operation

## Flow from Startup to Termination

### ▲ CAUTION

- If the program is not installed, see page 57 and install the program.

At first, please confirm the positions of the following features using the navigation's "Hardware Manual", "Operation Manual" and display's "Operation Manual".

- Disc loading slot
- NAVI/AV button
- NAVI MENU button

### 1 Start the engine.

After a little time, the navigation opening screen comes on for a few seconds. Then, a message screen is displayed.

- If the disc is not set, the message asking to insert the disc appears. After you set the disc correctly, your Navigation System starts up.

### 2 Insert the Pioneer DVD map disc to the disc loading slot.

### 3 Press the NAVI/AV button to switch the Navigation map screen.

Pressing the **NAVI/AV** button switches between the navigation map screen and the audio screen.

### 4 Check the details of the cautionary message and touch "OK".

You can operate the Navigation System by touching keys displayed on the screen.

If the route is already set, it changes to route guidance mode. The map of your surroundings is displayed.

- How to read the current position screen → Page 24
- Setting the time → Page 58
- Starting the operation with voice commands only → Page 51

□ You can press the **TALK (or VOICE)** button of the steering remote control to proceed instead of touching "OK".

- Touch keys which are not available at this time are grayed out.
- Be sure to touch the touch keys with a finger. Touch keys cannot be operated by a pen or similar object.

### 5 Press the NAVI MENU button.

Displays the main menu.

### 6 Searches the destination and gives route guidance.



- Specifying the address and searching the destination → Page 18
- Searching the destination by map → Page 27
- Other search methods → Page 29 to 32

### 7 Turn off the vehicle engine.

This Navigation System is also turned off.

- Until the vicinity of the destination is reached, the set route will not be deleted automatically even if the power is turned off.

## Basic Navigation

The most frequently used function is the Address Search, in which the address is specified and the destination searched. This section describes how to use the **Address Search** and the basics of using the Navigation System.

### CAUTION

- For safety reasons, you cannot use these basic navigation functions while your vehicle is in motion. To enable these functions, you must stop in a safe place and apply the parking brake.

### Basic flow of operation

- 1 Park your vehicle in a safe place, and apply the parking brake.  

- 2 Insert the Pioneer DVD map disc to the disc loading slot.  

- 3 Press the NAVI MENU button to display the Main menu.  

- 4 Select “Destination” from the Main menu.  

- 5 Select the method of searching for your destination.  

- 6 Enter the information about your destination.  

- 7 Your Navigation System sets the route to your destination, and the map of your surroundings appears.  

- 8 After releasing the parking brake, drive in accordance with the navigation information, subject of course to the important safety instructions noted on page 10 to 12.

## 1 Press the NAVI MENU button to display the main menu.

### 2 Touch “Address Search”.

Selects the method for searching the destination.



⌚ **Return Home** → Page 31

⌚ **Go to** → Page 31

⌚ **POI Search** → Page 29

⌚ **Vicinity Search** → Page 30

⌚ **Address Book** → Page 32

⌚ **Destination History** → Page 32

⌚ **Freeway Search** → Page 31

⌚ **Telephone Search** → Page 31

⌚ **Cancel Route** → Page 36

### 3 Touch “Zone code key”.

If the destination is in another zone, this changes the zone setting.

⌚ Once the zone has been selected, you only have to change zones when your destination is outside of the zone you have selected.

#### Zone code key



### 4 Touch the zone code of the destination and touch “OK”.

Modifies the zone setting and returns you to the previous display.

### 5 Input the house number and touch “OK”.

Touch the characters you wish to input.



The input text is deleted letter by letter from the end of the text. Continuing to press deletes all of the text.

#### “Back” :

Returns you to previous screen.

- Also input a prefix to the house number.
- If the house number you have input is not found among subsequently selected “Street” or “City” data, a message appears saying that the address has not been found. In that case, try inputting the house number again.
- Touching “OK” with no input allows you to specify and search a street name or the name of the city or area first.

### 6 Input the street name.

Touch the letter you wish to input. If the next screen is not automatically displayed even though the street name is entered, try touching “OK”.



The input text.

The number of applicable candidates.

#### “City” :

Touch if you wish to first specify the destination city or area.



The input text is deleted letter by letter for the end of the text. Continuing to press deletes all of the text.

#### “Sym.” :

You can input text with marks such as “&” and “+”.

“0-9”：

You can input text with numbers.

### **“Back” :**

Returns you to previous screen.

- ❑ For example, for "Early California Ct", you can just enter part of the name, such as "California".
  - ❑ While entering characters, if there is only one candidate following the next, that is automatically entered.
  - ❑ When touching "**Back**" on the text input screen to return to the previous screen, you may not be able to input text. In such a case, delete the letters entered in the text box.

**Searching your destination after specifying the name of city or area**

You can narrow down the searching candidates by initially specifying the name of city or area where your destination is located. Inputting the name of the city or area then selecting the destination city or area from the list returns you to the Street Name input screen. Now input the street name, select the street from the list, and proceed to step 9.



In the selected area, if you touch "**City**" without entering the name of city or area, you can check the list of the cities or areas, which you have searched in the past. (This item cannot be selected when searching by the name of city or area for the first time with this system or when you have selected an area that you have never searched before.)

### **7 Touch the street from the list.**



## Scroll bar

Touching the or on the scroll bar scrolls you through the list and allows you to view the remaining items.

- ② Searching the destination by map → Page 27

In the case of an item that cannot be displayed in a single line, touching the ► to the right of the item allows you to see the whole line.

- If only one location is found from the list, route calculation starts after pressing the item.
  - Touching the  specifies the selected street and streets intersecting it, allowing you to set an intersection as your destination. This is useful when you don't know the house number of your destination or cannot input the house number of the specified street.
  - Touching the  displays a map of the place you have selected. (Candidate place names may appear in the list screen.)

#### **8 Input the destination city or area.**

If the list screen is displayed, proceed to step 9.

**9** Touch the city or area where your destination is located.

Route calculation starts. When the route calculation is completed, the map of your surroundings appears. (The route is displayed in highlighted color.)



- ☐ If the selected street is very long and passes through several cities or areas, the screen for entering the name of the city or area appears.

If you did not input the house number in Step 5, the house number input screen comes up after the “**Street**” and “**City**” are determined. You should now input the house number (perform Step 5).

- ☐ If there is more than one place for the house number input, or if there is no such house number in that place, displays a list of a certain range. To start the route calculation, touch the range within the list you wish to specify as the destination.

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- You can also see the destination on the map by touching the  to the right of the list.
  - ⌚ Searching the destination by map →  
Page 27
  - If you press the **NAVI (or POS)** button during route calculation, the calculation is canceled and the map display appears.
  - When performing a destination search with the route already set, select whether to regard the specified area as your destination and search for a new route, or search for a route via that area.
  - ⌚ Adding way points to the route → Page 36
  - ⌚ Once searched for, a location is automatically stored in the "**Destination History**"

**10** Drive in accordance with the screen and voice information.

Your Navigation System gives you the following information with the timing adjusted to the speed of your vehicle:

- Distance to the next turning point
  - Direction of travel
  - Road number of the freeway
  - Way point (If this is set)
  - Your destination

⌚ How to view the screen → Page 23

⌚ Searching for another route → Page 35

⌚ Canceling route guidance → Page 36

- Touching the  or pressing the remote control's **GUIDE** button allows you to hear the information again.

- ☐ If you deviate from the route with the Guidance set to **Route View** or **Guide View** and enter a street not recorded on the disc, the screen changes to **Map View**. When you return to the route, the screen returns to the original mode and resumes route guidance.

- ☐ If you stop at a gas station or a restaurant during the route guidance, your Navigation System remembers your destination and route information. When you start the engine and get back on the road, the route guidance resumes.

## Buttons you can use

The status of the buttons appearing on the screen is indicated by their color.

Depending on the function the navigation is performing, you can touch some buttons, while other buttons are not available.



## Blue touch key

The button is operable



Dark gray touch key

The function is not available (e.g., operation is prohibited while driving).



Light gray touch key

The function is not available for areas not stored on the disc.

Touching this button activates a message indicating that the function is not available.

## **How to Use Menu Screens**

The basic operation of the navigation is performed by using menus.

There are two types of menu: the "Main menu" and the "Shortcut menu".

## Main menu

You use this menu for basic operation of your Navigation System.

## 1 With the map displayed, press the NAVI MENU button.

## 2 To change to the menu you want to use, touch the name of the menu displayed at the top of the screen.

The main menu is divided into four: "Destination", "Information", "Route Options", and "Settings".

## 3 If you want to return to the map, press the NAVI (or POS) (or NAVI MENU) button.

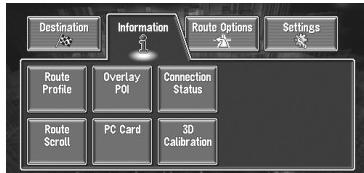
### Destination menu



Select the destination search method. Also the set route can be canceled from this menu.

- ⌚ Specifying the address and searching the destination → Page 18
- ⌚ Searching the destination by map → Page 27
- ⌚ Other search methods → Page 29 to 32

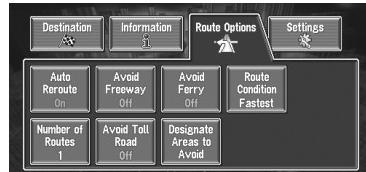
### Information menu



Used to check the route you set or check the navigation status.

- You can use "Route Profile" and "Route Scroll" only when a route has been entered.
- ⌚ Checking the set route → Page 34
- ⌚ Checking the navigation status → Page 47
- ⌚ Using a PC card → Page 44

### Route Options menu



Used to specify the conditions for setting the route to the destination.

- ⌚ Setting the Route Options → Page 32

### Settings menu



Set the navigation functions so they can be used easily.

- ⌚ Settings menu → Chapter 4
- If the contents of the menu are not fully displayed on the screen, touch "Next" to view the remaining contents.

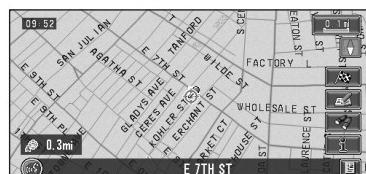
### Shortcut menu

Shortcuts allow you to perform various tasks, such as route calculation for the location indicated by the cross pointer, or registering a location in the **Address Book**, faster than using the Main menu.

## 1 When the map is displayed, briefly touch any part of the map.

If you continue to touch the map, it will start scrolling.

- ⌚ Moving the map to view the part you want to see → Page 26



## :Destination

Displayed when the map is scrolled. Set the route to the place specified with the cross pointer.

- ⌚ Searching the destination by map →  
Page 27

## :Chg.Route

Can be selected only during route guidance. You can add changes to the route in the route guidance.

- ⌚ Searching another route → Page 35
- ⌚ Detour for a specified distance → Page 35
- ⌚ Checking the route → Page 34
- ⌚ Canceling the route guidance → Page 36
- ⌚ Skipping a way point → Page 37

## :Registration

Registering the location indicated by the cross pointer to **Address Book**.

- ⌚ Registering a place → Page 40

## :Vicinity Search

You select a location with the cross pointer. Nearby POIs (Points Of Interest) will also be found.

- ⌚ Searching the facilities surrounding a certain place → Page 30

## :Overlay POI

Displays on the map the mark for surrounding facilities (POI).

- ⌚ Viewing POI information → Page 26

## :Note

You can check details of the item pointed by the scroll cursor.

- ⌚ Viewing the information of a specified location → Page 26

# How to Use the Map

Most of the information provided by your Navigation System can be seen on the map. You need to get to know how the information appears on the map.

## Switching the current position screen display mode

This section describes how to display the current position screen and change the map display mode.

There are four types of map display.

- **Map View**
- **Driver's View**
- **Guide View** (during route guidance only)
- **Route View** (during route guidance only)

**1 Press the NAVI (or POS) button to display a map of the area around your current position.**

**2 Press the NAVI (or POS) button again.**

**3 Touch the mode name or press the NAVI (or POS) button to select the mode you want to display.**



- If the mode is selected by pressing the **NAVI (or POS)** button, the screen automatically switches to the selected map display mode after 4 seconds.

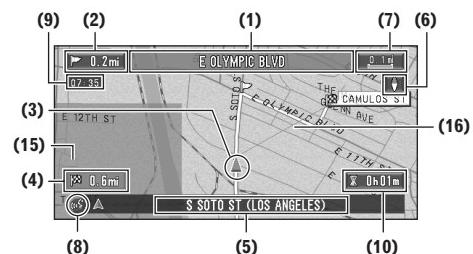
## How to view the map of the current location

### ⚠ CAUTION

- In Driver's View, a small gauge with no scale is depicted, but is not intended to be used as a speedometer. Use the actual speedometer of your vehicle to confirm speed.

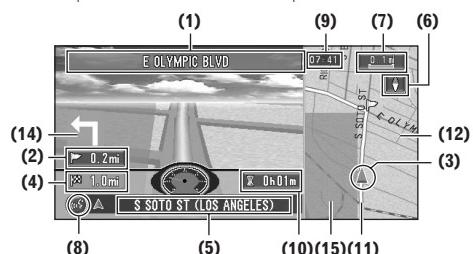
### Map View

Displays standard map.



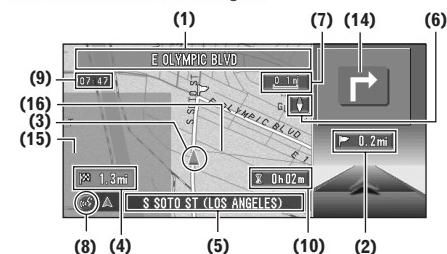
### Driver's View

The map from the driver's viewpoint is shown.



### Guide View

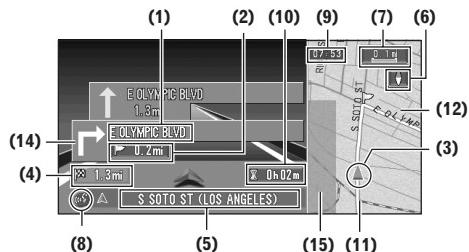
The map of your surroundings is shown on the left, and an arrow indicating the direction of travel is shown on the right.



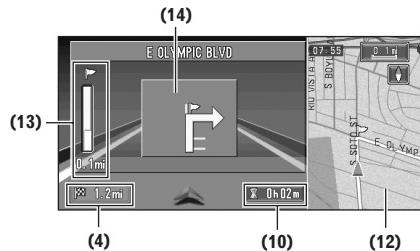
### Route View

Displays the name of the street you will next travel along and an arrow indicating the direction of travel.

### Normal condition



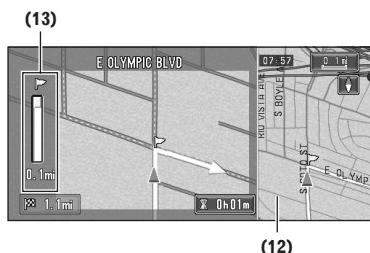
### When approaching an intersection (When "Close-up of Junction" is off)



### Enlarged map of the intersection

When "Close-up of Junction" in the Settings menu is "On", an enlarged map of the junction appears. If driving on freeway, the special guide illustration is displayed.

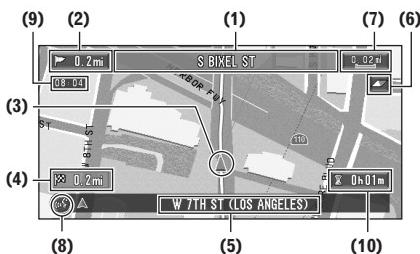
- Changing the close-up of junction setting → Page 50



- When set to **Driver's View**, the system cannot be changed to an enlarged intersection map.
- When the city map is displayed, you cannot switch to an enlarged map of the junction.

## City Map

In certain metropolitan city areas, a more detailed "City Map" is available at the 0.05 mi (50 m) map scale or lower (only those cities whose detailed city maps are registered in the map disc).



## Display items

### Guidance point\*

The next guidance point (next turning point, etc.) is shown by a yellow flag.

### Destination\*

The checkered flag indicates your destination.

### (1) Name of the next street to be used\*

### (2) Distance to the guidance point\*

Touch to access the next information.

### (3) Current location

The current location of your vehicle. The tip of the triangular mark indicates your heading and the display moves automatically as you drive.

### (4) Distance to the destination (or distance to the next way point)\*

If way points are set, the display changes with each touch.

### (5) Name of the street your vehicle is traveling along (or City Name, etc.)

### (6) Compass

The red arrow shows North. Each touch changes the map's display direction. (North is UP or Heading Up.)

### (7) Map scale

The scale of the map is indicated at distance. Touch to change the map's scale.

▷ Changing the map's scale → Page 25

### (8) VOICE icon

Touch to change to voice recognition mode.

- ▷ The voice operation of the navigation system  
→ Chapter 5

## (9) Current time

### (10) Estimated time of arrival (or travel time to your destination)\*

The display changes with each touch.

The estimated time of arrival is automatically calculated from the **Average Speed** set and the actual average speed.

▷ How to set average speed → Page 49

### (11) Tracking mark

The tracking mark shows the route your vehicle has traveled.

▷ Select the tracking setting → Page 50

### (12) Map of your surroundings (Side map)

### (13) Distance to an intersection\*

Displayed on the enlarged intersection map. The green bar gets shorter as your vehicle approaches an intersection.

### (14) Next direction of travel\*

When you approach an intersection, it appears green.

### (15) Area to Avoid\*

▷ About detour area → Page 43

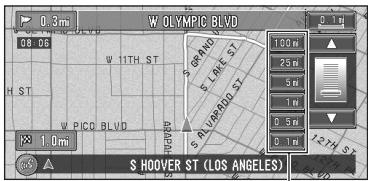
### (16) Direction line

The direction towards the location set in (4) is indicated with a straight line.

- Information with the mark (\*) appears only when the route is set.
- Depending on the conditions and settings, some items may not be displayed.

## Changing the scale of the map

Touching the "Map scale" key displayed on the upper right of the screen displays the scale gauge and Direct scale key. Directly touching the Direct scale key changes the map to the selected scale. Touching  $\Delta$  or  $\nabla$  on the scale gauge allows you to specify the scale in greater detail within a range of 25 yards - 1000 miles (25 meters - 2000 kilometers).



Direct scale key

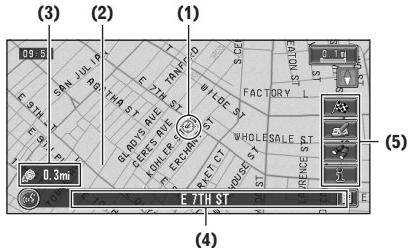
- The icon of a registered location is indicated when the map scale is 10 miles (20 km) or lower.
- POI icon is indicated when the map scale is 0.75 mile (1 km) or lower.
- The Direct scale key may not appear depending on the map display mode.

## Moving the map to the location you want to see

If you touch the map of your surroundings (Side map) briefly, the shortcut menu appears. Touching anywhere on the map for at least 2 seconds changes the map to Scroll mode and the map begins scrolling in the direction you touched. The scrolling stops when you release your finger from the screen. At this time, the scroll cursor appears at the center of the screen. Also a line connecting between the current location and scroll cursor appears.

Pressing the **NAVI (or POS)** button returns you to the map of your surroundings.

- Touch the area close to the center of the screen to scroll slowly; touch near the sides of the screen to scroll through quickly.



### (1) Scroll location

The position of scroll cursor shows the location selected on the current map.

- In the vicinity of the scroll cursor the road appears light blue. (The case of a map scale of 0.25 mile (200 m) or lower.)

### (2) Direction line

The direction towards the scroll cursor is indicated with a straight line.

### (3) Distance from the current location

Shows the distance in a straight line between the location indicated by the scroll cursor and your current location.

### (4) The street name, city name, area name and other information for this place.

Touching the ▶ on the right displays hidden text.

- Displaying information on the specified location → Page 26
- According to the map scale, items displayed on the map may differ.

### (5) Shortcut menu

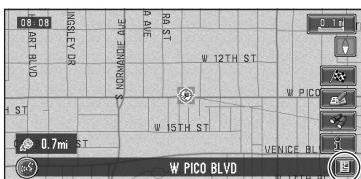
- How to view shortcut menu → Page 22

## Viewing the information of a specified location

An icon appears at registered places (home location, specific places, address book entries) and places where there is a POI icon. Place the scroll cursor over the icon to view detailed information.

### 1 Scroll the map and move the cross pointer to the icon you want to view.

### 2 Touch [ ].



Information for a specified location appears. The information shown varies according to the location. (There may be no information for that location.)

- Registering places → Page 39
- Displaying facilities (POI) mark on the map → Page 37

### 3 Touch “Back”.

You are returned to the previous display.

## Finding a destination on the map

If you search the location you want to visit by scrolling the map, and touch  in the Shortcut menu, you can specify your destination on the map.

**1 Press the NAVI (or POS) button to access the map screen.**

**2 Touch the map for at least 2 seconds.**

The map display changes to Scroll mode.

**3 Scroll the map and move the scroll cursor to the place you want to make your destination.**

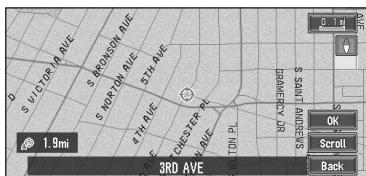
- ▷ Moving the map to view the part you want to see → Page 26

**4 Touch .**

- If you press the **NAVI (or POS)** button during route calculation, the calculation is canceled and the map display appears.

When the  appears on the right of the list

You can also set a destination by touching the  to the right of the list. Touch "OK" to confirm. The location pointed by the scroll cursor will be set as a destination.



Alternative option:

### Scroll :

The map display changes to the map with Shortcut menu.

If you touch anywhere on the map, the map display changes to Scroll mode.

- ▷ Shortcut menu → Page 22



## Setting a Route to Your Destination

### CAUTION

- For safety reasons, these route-setting functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

- Some information on traffic regulations by days or time depends on the time when the route calculation is performed. Thus, the information may not correspond with a certain traffic regulation when your vehicle actually passes the location. Also, the information on the traffic regulations provided will be for a passenger vehicle, and not for a truck/lorry or other delivery vehicles. Always follow the actual traffic regulations while driving.
- If you press the **NAVI (or POS)** button during route calculation, the calculation is canceled and the map display appears.

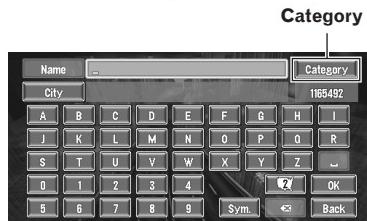
### Finding Your Destination by Selecting the Type of Facility

Information about various facilities (Points Of Interest - POI), such as gas stations, amusement parks or restaurants is available. By selecting the category (or entering the POI Name), you can search for a Point Of Interest.

- You can also narrow down the search range by initially specifying the name of the city or area where your destination is located.

### Searching for Points of Interest (POI)

- Touch "Destination" in the Main menu, and then touch "POI Search".
- Touch the zone code key of the destination and touch "OK".
  - Selecting the zone where you want to search → Page 19
- Touch "Category".



#### "Name" :

Touch this item if you want to specify the POI Name at first.

#### "City" :

Touch this item if you want to specify the destination city or area at first.

- Touch the desired category.
- POI's are divided into several categories.



If the category is not sub-divided into more detailed categories, the list will not be displayed. Proceed to Step 6.

## 5 Touch the subcategory.

## 6 Input the name of the POI.

If the list does not automatically appear when the name of the POI has been entered, try touching “OK”.

### “City” :

First, touch to specify the destination city or area.

## 7 Touch POI for your destination.

- Touching the  displays a map of the surroundings of the selected POI.
- Searching the destination by map → Page 27
- If the selected POI is the name of a chain of outlets and consequently the same store name applies to different locations (the number of outlets appears next to the chain's name), touch the name of the POI to display a list of those POIs and touch the particular POI that is your destination.

## Finding a POI in your surroundings

You can search for Points Of Interest in your surroundings on the map. Use it to find a POI to visit during a journey.

## 1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.

The list of Points Of Interest categories appears.

## 2 Touch the desired category.

The selected category will have a red check mark.

### Category



### OK:

Starts searching

### Back:

Returns to the previous screen

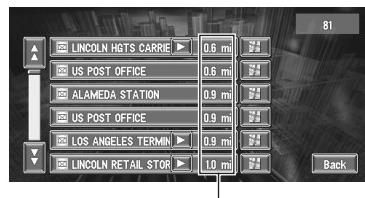
## Set:

Display the screen for creating POI shortcut.

- Create POI shortcut → Page 38
- If you touch one of the POI shortcuts (e.g. ) , you can start searching POI directly by selected category on the POI shortcut.
- If you want to search with more detailed categories, touch  . When the subcategory list appears, touch the items you want to search and touch “Back”. When only a few types of the detailed categories are selected, blue check marks will appear.
- You can select the detail category for up to 100 items.

## 3 Touch POI.

Names of POIs and their distance from your current location appear. They are listed in nearest-to-furthest order. To the left of each item is an icon indicating the category.



Distance to the facility

- When you touch  , the POIs around the specified location are shown on a map.
- Searching the destination by map → Page 27
- Searching range is approximately 10 miles (16 km) square from the current location.
- When some sub-categories are selected, the corresponding category is marked blue. When all the sub-categories within a category are selected, that category is marked red.

## Searching the facilities around the scroll cursor

## 1 Scroll the map and move the scroll cursor to the place you want to search POI.

## 2 Touch .

See Step 2 of “Finding a POI in your surroundings” for the following operations.

- ▷ Finding a POI in your surroundings → Page 30
- The distance indicated in the list of the search result is the distance from the scroll cursor to the facility.
- "Vicinity Search" in the Main menu searches your surroundings. On the other hand, in the case of  in the Shortcut menu (→ Page 23), the area around the scroll cursor will be searched.

## Setting an Entrance or Exit of a Freeway as Your Destination

You can set the entrance or exit of a freeway as your destination.

### 1 Touch "Destination" in the Main menu, and then touch "Freeway Search".

The display for entering the name of the freeway appears.

### 2 Touch the zone code key of the destination and touch "OK".

### 3 Enter the name of the freeway and touch "OK".

The list of freeways matching the name appears.

### 4 Touch the freeway.

The display for selecting your destination to the entrance or to the exit of the freeway appears.

### 5 Touch "Entrance" or "Exit".

The list of entrances to, or exits from, the selected freeway appears.

### 6 Touch your destination.

- You can also see the destination by touching the  on the right of the list.
- ▷ Searching the destination by map → Page 27

## Searching for Your Destination by Specifying the Telephone Number

If you know the telephone number of your destination, you can quickly search for your destination by specifying the telephone number.

### 1 Touch "Destination" in the Main menu, and then touch "Telephone Search".

The telephone number entry screen appears.

### 2 Input a telephone number.

- If there is more than one place for the number input, a list of those places is displayed. Touch the item you want in the list and proceed to step 3.

### 3 If the displayed place is satisfactory, touch "OK".

Touching "Scroll" changes the destination.

- ▷ Searching the destination by map → Page 27

## Route Calculation to Your Home Location or to Your Favorite Location

If your home location is registered, the route home can be calculated by a single touch of the touch key from the Main menu. Also, you can register one location, such as your workplace, as your favorite location, and the route is calculated in a similar way.

### 1 Touch "Destination" in the Main menu, and then touch "Return Home" or "Go to".

- ▷ "Registering your home and your favorite location" → Page 39

## Selecting Destination from the Destination History and Address Book

Any place that has been searched before is stored in the "Destination History". Places that you have registered manually, such as your home, are stored in the "Address Book". Simply select the place you want to go to from the list and a route to that place will be calculated.

- 1 Touch "Destination" in the Main menu, and then touch "Address Book" or "Destination History".
- 2 Touch your destination name.



Route calculation starts.

- ⌚ For information on the **Address Book** → Chapter 3
- ⌚ For information on the **Destination History** → Chapter 3
- ⌚ You can also see the destination by touching the on the right of the list.
- ⌚ Searching the destination by map → Page 27

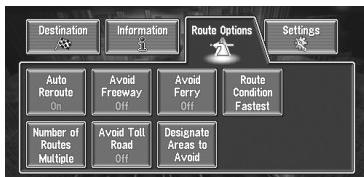
## Modifying the Route Calculation Conditions

You can change the route calculation conditions using the Route Options menu. The following description features an example of changing the number of the route to be searched.

- 1 Touch "Route Options" in the Main menu. The Route Options menu appears.

- 2 Touch "Number of Routes".

The content currently set appears under the name of the item. Each time you touch the item, the setting changes. Repeatedly touch the item until the value you want to set appears.



### Items that users can change

This section describes the details of the setting for each menu. Settings marked with an asterisk (\*) show that they are default or factory settings.

#### Auto Reroute

This setting controls whether, when you stray from the guided route, the system automatically recalculates the route to your destination.

##### On\* :

Auto Reroute function is turned on.

##### Off :

Auto Reroute function is turned off.

#### Avoid Freeway

This setting controls whether or not freeways may be included in the road calculation. (A route using freeway may be calculated in some cases, such as when setting your destination far away.)

##### On :

Calculate a route that avoids freeways.

##### Off\* :

Calculate a route that may include freeways.

## Avoid Ferry

This setting controls whether or not ferry crossings should be taken into account.

### **On :**

Calculate a route that avoids ferries.

### **Off\* :**

Calculate a route that may include ferries.

- The system may calculate a route that includes ferries even if "On" is selected.

## Route Condition

This setting controls whether the faster or the shorter route should be calculated.

### **Fastest\* :**

Calculate a route with the shortest travel time to your destination as a priority.

### **Shortest :**

Calculate a route with the shortest distance to your destination as a priority.

## Number of Routes

This setting controls whether the system should calculate only one route, or several routes.

### **1\*:**

Only one route judged as being optimum by your Navigation System is calculated.

### **Multiple :**

Several route options are calculated (maximum 6 routes).

- Calculate several route options → Page 33

## Avoid Toll Road

This setting controls whether or not toll roads (including toll areas) should be taken into account.

### **On :**

Calculate a route that avoids toll roads (including toll areas).

### **Off\* :**

Calculate a route that may include toll roads (including toll areas).

- The system may calculate a route that includes toll road even if "On" is selected.

## Designate Areas to Avoid

- About Areas to Avoid → Page 43

## Perform the route calculation of the several route options, and select one

You can get route calculations of several route options. After route options are calculated, select the one you want.

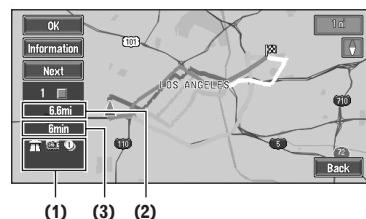
- 1 Set the "Number of Routes" to "Multiple".**

- ⇒ Changing the search conditions → Page 32

- 2 Search your destination and set the route.**

Calculated routes are shown in different colors (from two to six routes).

- 3 Touch "Next" to change the displayed route.**



The following information is displayed on this screen:

### **(1)Route calculation condition**

Displaying the conditions set by the Route Options menu by icon.

- Use/avoid freeway
- Use/avoid toll road
- Use/avoid ferry

Displaying impracticability of fulfilling the conditions by icon.

- Pass through Area to Avoid
- Use toll road against the setting "Avoid Toll Road" is "On".
- Use Ferry against the setting "Avoid Ferry" is "On".

### **(2)Distance to your destination**

### **(3)Travel time to your destination**

- You can see other places while displaying a candidate route by scrolling the map. Touching "Next" moves the next candidate route to the center and indicates the map.

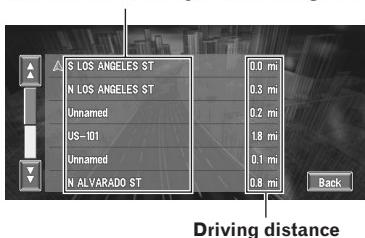


### 3 Touch "Route Profile".

### 4 Check the contents on the display.

As necessary, scroll the list.

#### Name of the streets you are driving through



Driving distance

### 5 Touch "Back".

You can return to the previous display.

- When a long distance route is calculated, your Navigation System may not be able to list all the roads. (In this case, the remaining roads will be shown in the list as you drive on.)

## Checking the set route from the Information menu

You can also check the information about the set route from the Information menu.

### 1 After touching "Information" in the main menu, touch "Route Profile" or "Route Scroll".

### 2 Check the contents on the display.

- "Route Scroll" → Page 34 (Step 3 and 4)
- "Route Profile" → Page 34 (Step 3 and 4)

### 3 Touch "Back".

You can return to the previous display.

## Recalculating the Route to Your Destination

You can set the length of the area, and avoid just that area, or you can even search a new route from the current location to your destination. (On the map screen during route guidance, try the following operations.)

### 1 Touch the map screen.

The Shortcut menu appears.

### 2 Touch .

The Route/Detour menu appears.

### 3 Touch "Reroute" or the distance from the list.



After the route is calculated, the map screen shows your surroundings and route guidance is resumed.

On this display, you can select the following items:

#### Reroute :

The route from the current position to your destination is recalculated.

#### The distance of the detour

##### (1-50 mile/km) :

Searches detours of a specified distance in the route ahead of your current position.

- For details of switching the display between "mile" (miles) and "km", "KM/Mile Setting" → Page 51

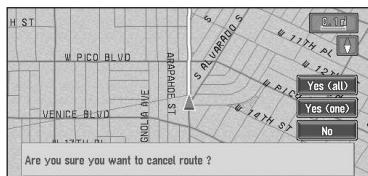
## Cancelling the Route Guidance

If you no longer need to travel to your destination or if you want to change your destination, follow the steps below to cancel the route guidance.

### 1 Touch “Destination” in the Main menu, then touch “Cancel Route”.

The message confirming whether to cancel the current route appears.

### 2 Touch “Yes (all)”.



The current route is deleted, and a map of your surroundings reappears.

On this screen, you can also select the following items:

#### **Yes (one) :**

Route is recalculated by canceling the selected way point.

#### **No :**

Returns to the previous display without deleting the route.

- You can also cancel the route by selecting “**Cancel Route**” in the Route/Detour menu. (To display the Route/Detour menu, select  in the Shortcut menu.)

## Adding Way Points to the Current Route

You can select way points (locations you want to visit on the way to your destination) and you can recalculate the route to pass through these locations.

## Adding a way point

You can add up to five way points. This is achieved as follows :

### 1 Specify the location you want to visit.

Specify a way point in the same way as specifying a destination.

At completion of the location search, a message is displayed asking whether or not to set that specified location as the destination, or as a pass-through location.

- Specifying the address and searching the destination → Page 18

- Searching the destination by map → Page 27

- Other search methods → Page 29 to 32

### 2 Touch “Way Point”.

### 3 Confirm the contents of the list, and touch “Done”.



Route calculation with the specified location as a way point starts when you touch “**Done**”. On this display, you can select the following items:

#### **Add :**

Switch the display to search for points. After searching, add that point as a way point by touching “**OK**”.

- Specifying the address and searching the destination → Page 18
- Searching the destination by map → Page 27
- Other search methods → Page 29 to 32

#### **Delete :**

You can delete way points from the list.

#### **Sort :**

You can sort your destination and way points. The system will put the nearest point (distance in a straight line) from the current location to way point 1, and sort the other points (including your destination) in the nearest order from previous way point.

#### **Original :**

You can return the way points and destination to their original order.

- If you set a way point(s) in the route to your destination, the route up to the next way point will appear light green. The rest of the route will be light blue.

## Skipping a way point

If the points are set, the next way point along the route can be skipped.

### 1 Touch the map screen.

The Shortcut menu appears.

### 2 Touch .

The Route/Detour menu appears.

### 3 Touch “Skip Way Point”.

A message asking whether you want to skip the next way point appears.

### 4 Touch “Yes”.

A new route to your destination through all the remaining way points, except for the skipped way point, is calculated.

## Deleting a way point from the route

If you no longer need to pass through a way point you have not yet reached, you can delete that place from the list of way points and calculate a new route.

### 1 Touch “Destination” in the Main menu, then touch “Cancel Route”.

A message asking whether you want to cancel the route appears.

### 2 Touch “Yes (one)”.

### 3 Touch the way point you want to delete.



- If you want to delete other way points, touch “Delete” and repeat Step 3 above.

### 4 Touch “Done”.

A new route to your destination via the remaining way points is calculated.

- You can also cancel the route by selecting “Cancel Route” in the Route/Detour menu. (To display the Route/Detour menu, select  in the Shortcut menu.)

## Displaying certain POI on the map

Selected POI in a certain category can be shown on the map, and you can check the location on the display.

### 1 Touch any part of the map screen.

The Shortcut menu appears.

### 2 Touch .

The list of POI categories appears.

### 3 Touch the category you want to display.

The selected item is marked. If you want to select other categories, repeat this step.

- If you want to display with more detailed categories, touch . When the subcategory list appears, touch the item you want to display and touch “Back”.
- You can select the detail category up to 100 items.
- If you touch one of the POI shortcuts (e.g. ) , you can display POI immediately by selected category on the POI shortcut.

### 4 Touch “Back”.

POI's in the selected category appear on the map.

-  Searching the destination by map → Page 27
-  Viewing the information of POI → Page 26
- When some sub-categories are selected, the corresponding category is marked blue. When all the sub-categories within a category are selected, that category is marked red.
- You can also display POI by touching “Information” in the main menu, and then touching “Overlay POI”.

## Using POI shortcuts

### Selecting POI shortcuts

You can select up to six shortcuts to your favorite category for the searching points of interest (POI).

As default setting, four icons are displayed:

**Fast Food Chains, Restaurant Chains, Restaurant, and Groceries.**

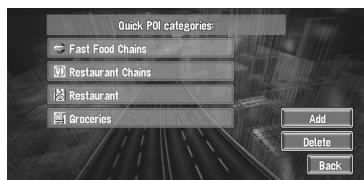
**1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.**

**2 Touch “Set”.**



Displays a list of already selected POI shortcuts.

**3 Touch “Add”.**



Displays a POI category list.

**4 Touch the category you want to set.**

The selected item is marked. If you want to select other categories, repeat step 3 and 4.



- If you want to set more detailed categories, touch . When the subcategory list appears, touch the item you want to add and touch “Back”

**5 Touch Back.**

The selected category is added to the list of POI.

- You can select a POI shortcut by touching “Information” in the main menu and then touching “Overlay POI”. The steps are the same for both.

### Use a registered shortcut to find POI near your vehicle

**1 Either touch “Vicinity Search” in the main menu.**

**2 Touch the one of the POI shortcuts.**



**3 Touch POI.**

See Step 3 of “Finding a POI in your surroundings” for the following options.

### Deleting a POI shortcut

**1 Touch “Destination” in the Main menu, and then touch “Vicinity Search”.**

**2 Touch “Set”.**

**3 Touch “Delete”.**

Displays a list of already registered POI shortcuts.

**4 Touch the shortcut to be deleted.**

A red check appears next to the selected shortcut.

**5 Touch “Delete”.**

Deletes the selected shortcut from the list.

# Editing the Navigation Utilities

## ▲ CAUTION

- For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

## Editing Registered Locations

The **Address Book** can store up to 300 registered locations. These can include home location, favorite place, and destinations you have already registered. This registered location information can also be modified. Also, routes to registered locations can be calculated by touch screen or voice. Registering places you visit frequently saves your time and effort.

- You can register up to 100 entries for voice operation. Two out of those 100 entries are allocated to the items that are registered to "Return Home" and "Go to".
- The Address Book is automatically updated in alphabetic order. However, "Return Home" and "Go to" always appear at the top.

## Registering your home and your favorite location

Of the 300 registered locations that can be stored, home location and favorite location can be stored separately in the **Address Book**. Registering your favorite location for the first time is described here. You can change the registered information later. You might find it useful to register your workplace or a relative's home as your favorite location.

### Map icons:



Home location icon



Favorite location icon

- 1 Touch "Settings" in the Main menu, then touch "Go to".

When registering your home location, touch "Return Home".



You can select a method of location search on the display.

- The items already registered under "Return Home" or "Go to" can be modified.

- 2 Search for a location to register.

- Specifying the address and searching the destination → Page 18
- Searching the destination by map → Page 27
- Other search methods → Page 29 to 32

- 3 Point the scroll cursor to the location you want to register and touch "OK".

Completes the registration and returns to the previous display.

- "Editing a location's information" → Page 40

## Registering a previous location in the Address Book

Once a destination or way point is searched, it is automatically retained and stored in the **Destination History**. If a search is canceled while still in progress, only the places where the map was displayed and scrolled through or places where the short-cut menu was displayed are retained and stored. Note that after 100 places are stored, new places are automatically overwritten on top of old ones, in oldest to most recent order. Therefore, to ensure that certain places are kept and not overwritten, be sure to register them in the **Address Book**.

- 1 Touch “Destination” in the Main menu, then touch “Destination History”.**
- 2 Touch  on the right-hand side of the place you want to register in the Address Book.**



That place can be registered or deleted.



The map of that place can be displayed.

- ⌚ Searching the destination by map →  
Page 27

- 3 Touch “Registration”.**

Registration is now complete.

- ⌚ “Editing a location’s information” →  
Page 40  
⌚ in the Shortcut menu → Page 23

## Editing a location’s information

In the Address Book menu, touching the  on the right-hand side of the place displays the Address Book Operate menu.

To edit the information about the location:

- 1 Touch “Destination” in the Main menu, then touch “Address Book”.**
- 2 Touch  on the right-hand side of the place whose information you want to edit.**



The information related to that place can be edited.



The map of that place can be displayed.

- ⌚ Searching the destination by map →  
Page 27



Displayed on the left-hand side of places that can be searched by voice command.

- 3 Touch “Edit Information”.**



The Address Information menu appears.

Refer to the item corresponding to the subsequent operation. After finishing the operation, the Address Book menu appears. You can continue to edit other information items if necessary.



**1. Name**

The name can be used as a command for voice operation.

**2. Name (2nd line)**

The name of the city appears in this column. (Not editable)

**3. Phone number**

You can search by registered telephone number.

**4. Pictograph**

The symbol displayed on the map.

**5. Sound**

The selected operating sound is played.

**Changing a name****1 Touch “Edit Name” and touch “Yes”.**

The message confirming whether or not to register the entered name as voice command is displayed.

Alternative option :

**No :**

When not registering a name as a voice command, select “No”.

**2 Enter a new name; touch “OK”.**

The name of the current location appears in the text box. Delete the current name, and enter a new name between 6 and 23 characters long. (If you selected “No” in Step 1, you can enter a new name between 1 and 23 characters long.)

**3 If the pronunciation is correct, touch “Yes”.**

The details you set are registered, and the Address Book menu appears.

Alternative options :

**No :**

Select to return to the display for entering characters.

**Repeat :**

You can reconfirm the pronunciation of the name you entered.

□ When you select “Yes”, is shown on the left side of the location name displayed in the Address Book menu. This mark indicates that this name can be used as a voice command during voice operation.

□ If the number of items to be used in voice operation exceeds 100, a list appears on the display. Select an item from the list and overwrite it.

□ You can also store locations in the **Address Book** on a PC card → Page 44

□ You cannot change the name of your home.

□ During voice operation, you can get a route calculated by saying the registered name.

□ Information on voice operation → Chapter 5

**Entering or changing a phone number****1 Touch “Edit Phone Number”.****2 Input a phone number; touch “OK”.**

The Address Information menu appears.

□ To change a registered phone number, delete the existing number and then enter a new one.

**Selecting a pictograph to appear on the map****1 Touch “Select Image”.****2 Touch the Pictograph to appear on the map.**

The Address Information menu appears.

□ You cannot change the mark of your home or of your favorite location.

**Selecting sound****1 Touch “Select Sound”.****2 Select the sound.**

The Address Information menu appears.

If you want to hear the operating sound, touch .

## Deleting Address Book or Destination History Information

Items registered in the **Address Book** or **Destination History** can be deleted. All entries of the data in the **Address Book** or **Destination History** can be deleted at once.

### 1 Touch “Destination” in the Main menu, then touch “Address Book”.

To delete items in the **Destination History**, touch “**Destination History**”.

### 2 Touch [ ] on the right-hand side of the place you want to delete.

### 3 Select the deletion method.



A message confirming deletion appears.

Alternative options :

#### **Delete This Item :**

Delete the location selected in Step 2.

#### **Delete All Address Book Entries (or Delete All Destinations) :**

Delete all the Address Book or Destination History data.

### 4 Select “Yes”.

The data you selected is deleted.

Alternative option:

#### **No :**

The display shown in Step 3 appears.

- Because deleted data cannot be restored, take extra care not to select “**Delete All Address Book Entries**” by mistake.

## Changing the position of locations registered in the Address Book

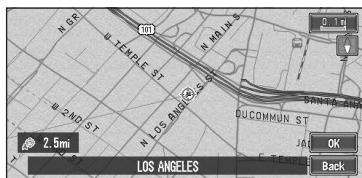
You can select a location registered in the **Address Book**, display a map of its surroundings, and change its position.

### 1 In the Address Book menu, touch [ ] on the right-hand side of the place whose position you want to change.

### 2 Touch “Modify Location”.

The map of the selected area and its surroundings appears.

### 3 Touch the display to change its position, then touch “OK”.



The position is changed.

## Setting Areas to Avoid

If you register **Areas to Avoid**, such as crowded intersections or congested areas, routes can be calculated that avoid those areas. **Areas to Avoid** can be set from the Route Options menu.

- An area not stored on the disc cannot be set as an Area to Avoid.

### Registering an Area to Avoid

This section describes how to register an Area to Avoid for the first time. You can register up to five Areas to Avoid.

**1 Touch "Route Options" in the Main menu, then touch "Designate Areas to Avoid".**

**2 Select one of the items shown in "New Area".**

When registering for the first time, any item on the list is shown as "**New Area**".



**3 Select the place to register and display the map.**

- Specifying the address and searching the destination → Page 18
- Searching the destination by map → Page 27
- Other search methods → Page 29 to 32

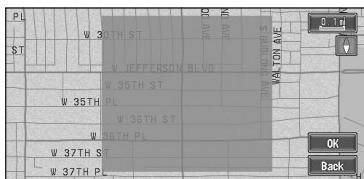
Once a search is complete, a map with the specified location at its center appears.

**4 Change the map scale and decide the size of the Area to Avoid.**

The Area to avoid is enclosed in a red frame.

You can also change the map scale though the maximum map scale for registering Areas to Avoid is 0.1 mile (100 m).

**5 Scroll the map, adjust the position of the red frame, and touch "OK".**



If you want to stop registration, touch "**Back**".

- Depending on the setting of route search conditions, you may not be able to avoid the specified areas. The confirmation message is displayed on the screen at this time.
- Information on route calculation conditions → Page 33

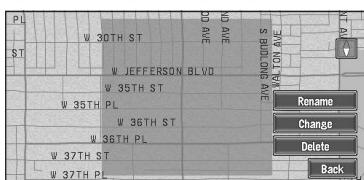
### Changing or deleting an Area to Avoid

You can subsequently change/rename/delete an Area to Avoid.

**1 Touch "Route Options" in the Main menu, then touch "Designate Areas to Avoid".**

**2 Select the area you want to change or delete.**

**3 Select the desired operation.**



On this screen, you can select the following options:

#### Rename :

Changes the name. Enter the new name and touch "**OK**". This returns you to the Route Options menu.

#### Change :

A specified area can be changed. For the next steps, see Step 3 in the "Registering an Area to Avoid" above.

#### Delete :

Delete the selected Area to Avoid.

## Using a PC Card

You can store the following information on a PC Card (sold separately):

- Locations registered manually such as your home, your favorite location, or a location whose information was edited (Registered Locations)
- Background image when navigation or audio is operated (Background Picture)
- The PC card is very useful for sharing the data in the **Address Book** with friends or for storing the data as backup.
- If a PC card is not inserted in the navigation system correctly, PC card functions are not available.
- For details of PC cards that support this system, refer to the following.
  - If you are using "AVIC-9DVD", refer to the "Operation Manual".
  - If you are using models other than the above, refer to the "Hardware Manual".

## Initializing a PC card

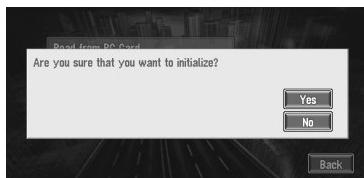
Before using a brand new PC card, you must initialize it.

### 1 Touch "Information" in the Main menu, then touch "PC card" and "Initialize PC Card".

- Do not cut off the power supply for the navigation system (or turn the ignition switch to ACC OFF) until initialization of the PC card is complete.

### 2 Touch "Yes".

If you want to cancel the initialization, touch "No".



## Storing the data of registered locations in the PC card

You can select any entry registered in the **Address Book** and store the data on the PC card. Data can be stored in groups. A new group can be created.

- The volume of data you can register depends on the capacity of the PC card.

### 1 Touch "Information" in the Main menu, then touch "PC card" and "Save to PC Card".

### 2 Touch the desired item for storage.



Number of groups you can store

The selected entry is marked. To register other locations, repeat this step.

Alternative option:

#### All :

All the locations are selected (or canceled) at once.

### 3 After finishing the selection of locations, touch "OK".

### 4 Touch "New Group".

- If the data is to be stored in a group already registered in the PC card, select the group name in the list.

### 5 After entering a group name, touch "OK".



The data of the registered location is stored in the entered group.

## Loading registered locations data from a PC card

Address Book data stored on a PC card can be loaded to the Navigation System.

- ▷ "If a message about the PC card is displayed"  
→ Page 72

- 1 Touch "Information" in the Main menu, then touch "PC card" and "Read from PC Card".**

The list of groups appears.

- 2 Touch the desired group.**

- 3 Touch the desired locations.**



Selected locations are marked. To load the data from other locations, repeat this step.

Alternative option:

**All :**

All the locations are selected (or canceled) at once.

- 4 Touch "OK".**

The data of the selected locations is stored in the **Address Book**.

## Deleting PC card data

You can delete data for a specified location or a whole group.

- 1 Touch "Information" in the Main menu, then touch "PC card" and "Delete PC Card Data".**

- 2 Touch a group where the location you want to delete is stored.**

- 3 Touch a location you want to delete and touch "OK".**

The selected location is marked. To delete other locations, repeat this step.

Alternative option:

**All :**

Select (or cancel) all locations in a group.

- 4 Touch "Yes".**

The specified location is deleted.

## Changing Background Picture

In the menu operation screen, you can indicate a picture you like on the background. Some pictures are already stored, but you can also use pictures (JPEG format data) created by a personal computer or a digital camera. The following two types of background pictures can be changed:

- **AV Background** : Background for the screen during the operation of audio, or during playback.
- **Navigation Background** : Background of navigation menu screen.

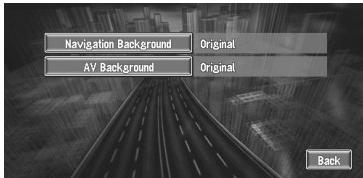
Several background pictures are stored in the Pioneer DVD map disc.

Here, a method of changing background picture is described with an example of loading the picture stored on a PC card to the navigation system as the background picture.

- The "**AV Background**" cannot be used with the AVD-W6210.
- When storing original pictures on a PC card, create a folder named "**BG**" in a PC card, and store the picture files in this folder. Up to 20 picture files can be used in the **BG** folder.
- When changing the background screen, please change the settings so that the combined display also can display the navigation system unit's background.
- Only JPEG format (.jpg" or ".JPG") pictures can be used as a background picture.
- You can only use standard characters (alphabets of both cases: A-Z, a-z) and numbers (0-9) for the file name of a background picture (international (accented) characters cannot be used).
- Pictures up to a maximum of 2048×1536 pixels can be used. We cannot guarantee a proper operation for a picture bigger than this size.

- Progressive format JPEG pictures cannot be used.

- 1 Insert a PC card into the PC card slot.**
- 2 Touch "Settings" in the Main menu, then touch "Background Picture Setting".**  
The picture selected for each screen is indicated on the right side of "**AV Background**" and "**Navigation Background**" items.
- 3 Touch "Navigation Background" or "AV Background".**



- 4 Touch "Import from PC card".**  
The list of the pictures stored in a PC card is displayed.  
On this screen, you can select the following item:  
**Back to Original :**  
The picture when purchased is selected.
  - In step 4, touching other than "**Import from PC card**" allows you to select a background image stored on the Pioneer DVD map disc.
- 5 Touch a picture you want for the background.**
- 6 Select how to display the picture.**

You can select the following items:

**Center :**

Selected picture is displayed at the center of the screen.

**Repeat :**

Selected picture is patterned, and displayed as covering the whole screen.

- When selecting images already stored on the Pioneer DVD map disc, you cannot select the layout method for those images.

The background image starts changing. After a short while, the new background image appears.

## 7 Touch "Done".



On this screen, you can select the following items:

**Select another Picture :**

This is selected when you want to change to another picture. Return to Step 5.

**Change to another background :**

Select if you want to successively change the Audio Operating screen backgrounds or the Navigation backgrounds. Return to step 3.

- When changing a picture starts, do not cut off the power supply for the navigation system (or turn the ignition switch to ACC OFF) until the message informing the completion of changing a picture is indicated.
- When the Navigation System is reset, or the language setting is changed, the background picture may change back to the original picture. (There is also a possibility that the system will revert to the original picture for some other reason.) If this happens, set the background picture again.

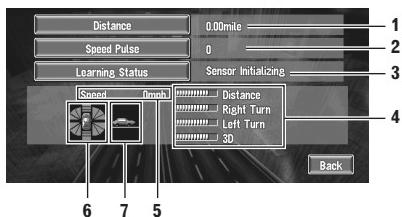
## Checking the Navigation Status

The navigation status, including the driving status of a vehicle, positioning status by GPS satellite, learning status of the 3D sensor, and cable connection status can be checked.

## Checking sensor learning status and driving status

### 1 Touch “Information” in the Main menu, then touch “3D Calibration”.

The 3D Calibration screen appears.



#### 1. Distance

Driving distance is indicated.

#### 2. Speed Pulse

Total number of speed pulses is indicated.

#### 3. Learning Status

Current sensor status is indicated.

#### 4. Degree of learning

Sensor learning situations of distance (**Distance**), right turn (**Right Turn**), left turn (**Left Turn**), and 3D detection (**3D Detection**) are indicated by the length of bars.

#### 5. Speed

Speed detected by the navigation system is indicated. (This indication may be different from the actual speed of your vehicle, so please do not use this instead of the speedometer of your vehicle.)

#### 6. Acceleration and deceleration/Rotational speed

Accelerated or decelerated velocity of your vehicle is indicated. Also, rotational speed when your vehicle turns to left or right is shown.

#### 7. Inclination

Degree of slope of the street is indicated.

## ••••• To clear values...

If you want to delete the learned results stored in “**Distance**”, “**Speed Pulse**” or “**Learning Status**”, touch each item, then touch “**Clear**”.

- The navigation system can automatically detect outer dimensions of the tires. If tires have been replaced, the navigation system automatically detects it and begins learning according to the new tires.

## Checking the connections of leads and installation positions

Check that leads are properly connected between the navigation unit and the vehicle. Please also check whether they are connected in the correct positions.

### 1 Touch “Information” in the Main menu, then touch “Connection Status”.

The Connection Status screen appears. The reception status of the signal and the connection status of each cable are shown.



#### 1. Speed Pulse

The Speed Pulse value detected by the navigation system is shown. “0” is shown while the vehicle is stationary.

#### 2. GPS Antenna

Indicates the connection status of the GPS antenna, the reception sensitivity, and from how many satellites the signal is received. The sign of “**OK**” is displayed when the signal is received normally. The sign of “**No good**” is displayed when the reception condition is not good.

#### 3. Installation Position

Indicates whether the Installation position of the navigation unit is correct or not. When the navigation unit is installed with an extreme angle exceeding the limitation of the installing angle, “**Incorrect angle**”

will be displayed. When the angle of the navigation unit has been changed, "**Excessive vibration**" will be displayed.

#### 4. Parking brake

When the parking brake is applied, "**On**" is displayed. When the parking brake is released, "**Off**" is displayed.

#### 5. Power Voltage

The power supply (reference value) provided from the vehicle battery to the navigation system is shown. If the voltage does not fall within the range of 11 to 15V, check that power cable connection is correct.

#### 6. Illumination

When the headlights or small lamps of a vehicle are on, "**On**" is displayed. (If the orange/white lead is not connected, "**Off**" appears.)

#### 7. Back Signal

When the gear lever is shifted to "R", the signal switches to "**High**" or "**Low**". (Which of these is displayed depends on the vehicle.)

# Customizing Your Navigation System

## CAUTION

- For safety reasons, these functions are not available while your vehicle is in motion. To enable these functions, you must stop in a safe place and put on the parking brake before setting your route.

## Modifying the Default Settings

You can tailor default settings such as navigation functions and information display for ease of use. The following example describes how to change settings. In this example, the “**KM/Mile Setting**” settings is set to “**Mile & Yard**”.

### 1 Touch “Settings” in the Main menu.

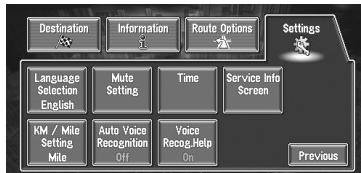
The Settings menu appears.

### 2 Touch “Next”.

The screen changes. “**Mile**” is displayed below “**KM/Mile Setting**”, indicating that this function is currently set to “**Mile**”.

- When you touch items with a setting below them, their setting changes. When you touch items with no setting below them, a setting screen appears.
- Touching “**Next**” or “**Previous**” changes the screen and displays another item.

### 3 Touch “KM/Mile Setting”.



“**Mile & Yard**” is displayed below “**KM/Mile Setting**”, indicating that “**KM/Mile Setting**” is set to “**Mile & Yard**”.

If you want to change another setting, select the item you want to change and repeat the procedure in step 3.

## Items Users can Change

This section describes the details of the setting for each item. Settings marked with an asterisk (\*) show that they are default or factory settings.

### Return Home

- Registering and changing your home location → Page 39

### Go to

- Registering and changing your favorite location → Page 39

### Average Speed

When calculating expected time of arrival and the number of hours to the destination, the average speed for the freeway or ordinary road used is set.

Touch “+” and “-” to change the numeric value.

### • Minor Ordinary Road

- When the “**KM/Mile Setting**” is set to “**Mile**” or “**Mile & Yard**”, it can be set in 5 mile increments from 10 miles to 100 miles (35 miles\*).
- When the “**KM/Mile Setting**” is set to “**km**”, it can be set in 5 km increments from 20 km to 110 km (55 km\*).

- **Major Ordinary Road**
- When the "KM/Mile Setting" is set to "Mile" or "Mile & Yard", it can be set in 5 mile increments from 10 miles to 120 miles (45 miles\*).
- When the "KM/Mile Setting" is set to "km", it can be set in 5 km increments from 20 km to 150 km (70 km\*).

#### • **Freeway**

- When the "KM/Mile Setting" is set to "Mile" or "Mile & Yard", it can be set in 5 mile increments from 30 miles to 120 miles (60 miles\*).
- When the "KM/Mile Setting" is set to "km", it can be set in 5 km increments from 60 km to 150 km (85 km\*).

### **Modify Current Location**

Touch the screen to adjust the current position and direction of the vehicle displayed on the map.

### **Hardware Volume**

The sound volume for the navigation can be set. You can separately set the volume of the route guidance and of the beep sound.

Touch "+" and "-" to change the numeric value.

### **Demo Mode**

This is a demonstration function for shops. After a route is set, the simulation of the route guidance to a destination is automatically displayed. Normally, set this to "Off".

#### **Repeat :**

Repeat demo drive.

#### **Off\* :**

Demo Mode is set off.

### **Day/Night Display**

To improve the visibility of the map during the evening, you can change the combination of the colors of the map.

#### **Nighttime\* :**

You can change the combination of the colors of a map according to whether the vehicle lights are On or Off.

#### **Daytime :**

The map is always displayed with bright colors.

### **Map Display**

Screen display-related items can be set.

#### • **Tracking Display**

The tracking display setting has the following options.

#### **Always :**

Display tracking for all journeys.

#### **This Trip :**

Display tracking dots but erase them when the navigation system is turned off (when turning off the engine of your vehicle or turn the ignition switch to ACC OFF).

#### **Off\* :**

Do not display tracking dots.

#### • **AV Guide Mode**

Setting whether or not to switch to the navigation screen automatically when your vehicle approaches a guidance point such as an intersection while displaying a screen other than navigation.

#### **On\* :**

Switching from audio operation screen to navigation screen.

#### **Off :**

Screen is not switched.

You cannot use this function when the AVD-W6210 is connected.

#### • **Close-up of Junction**

This setting enables to switch to an enlarged map around the point where your vehicle is approaching an intersection, entrance/exit of freeway, or a junction.

#### **On\* :**

Display switches to an enlarged map.

#### **Off :**

Does not switch to an enlarged map.

#### • **Arrow in AV**

Set whether to display the guidance information by arrow on the Audio Operation screen of the Pioneer AV Head Unit or Display.

#### **On\* :**

Display guidance information by arrow on the Audio Operation screen.

#### **Off :**

Do not display guidance information by arrow on the Audio Operation screen.

You cannot use this function when the AVD-W6210 is connected.

## Background Picture Setting

- ⌚ The background picture can be changed →  
Page 45

## Language Selection

- ⌚ The language displayed can be set → Page 57

Once you change the language, installation of the program starts.

### ⚠ CAUTION

- Once the installation of the program starts, do not cut off the power supply for the Navigation System and do not switch off the Navigation System until the installation is completed and the map of your surroundings appears.

## Mute Setting

Items related to muting of sound volume can be set.

This can be set when your Navigation System is combined with the Pioneer Head Unit, AV Head Unit or Display with a muting function.

- ⌚ "About AV Head Units /Displays to be Connected" → Page 59

### • Voice Recognition

This setting controls whether the volume of the audio source is automatically muted during voice operation.

#### On\* :

During voice operation, the volume of the audio source is muted automatically.

#### Off :

The volume of the audio source stays the same during voice operation.

- If you select "Off", the sound from the audio source may interfere with the voice recognition system.

### • Voice Guidance

This setting controls whether the volume of the audio source is automatically muted during voice guidance.

#### On\* :

During voice guidance, the volume of the audio source is muted automatically.

### Off :

The volume of the audio source stays the same during voice guidance.

## Time

Adjusts the systems clock. The time difference (+, -) between the time originally set in the navigation system is set here.

You can also select summer time On/Off.

- ⌚ Time settings → Page 58

### On :

Summer time is taken into account.

### Off\* :

Summer time is not taken into account.

- When the period of summer time comes, or when the summer time ends, the navigation system does not automatically change the summer time setting.

- ⌚ Change the summer time setting → Page 58

## Service Info Screen

Displays the disc production number and version information.

## KM/Mile Setting

This setting controls the unit of distance displayed on your Navigation System.

### Mile\* :

Show distances in miles.

### Mile & Yard :

Show distances in miles and yards.

### km :

Show distances in kilometers.

## Auto Voice Recognition

After you have started the engine, turn on voice recognition and set whether or not to perform all operations up to route searching by voice.

(This function is effective only when a route is not set.)

### On :

The automatic voice recognition is engaged each time your vehicle is started.

### Off\* :

For starting voice operation, press the **TALK (or VOICE)** button or touch **VOICE** icon.

## **Voice Recog.Help**

This setting controls the list of available voice commands displayed during voice operation.

### **On\* :**

The list of commands is shown.

### **Off :**

The list of commands is not shown.

# Operating Your Navigation System with Voice

## Basics of Voice Operation

### To Ensure Safe Driving

#### **CAUTION**

- For safety reasons, Voice Help menu (Voice Recog.Help) is not available while your vehicle is in motion. To enable this function, you must stop in a safe place and put on the parking brake before setting your route.

Your Pioneer Navigation System comes with the latest in voice recognition technology. You can use voice commands to operate many of its functions. This chapter describes where you can use voice commands, and also what commands the system accepts.

### Flow of voice operation

You can start voice operation any time even when the map screen is displayed or audio is operated. The basic steps of voice operation are as follows. The steps are almost the same as when using the Remote Control.

1 Press the **TALK (or VOICE)** button or touch **VOICE** icon to activate voice operation.



2 Speak a command into the microphone.



3 When the command is recognized, it is repeated.



4 As necessary, repeat Steps 2 and 3.

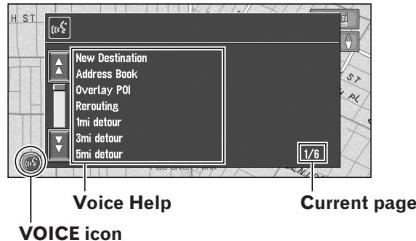


5 The voice command is carried out.

- With the "CD-SR80" Steering Remote Control (sold separately), you can press the BAND button and the F button to switch on the operation mode of the Steering Remote Control. When the operation mode is switched on, by pressing the BAND button of the Steering Remote Control, you can activate voice operation, which is equivalent of pressing the **TALK (or VOICE)** button. ("CD-SR90" and "CD-SR100" can be used. For the details of their operation, see the instruction manuals attached to them.)

### When using voice operation for the first time

Until you are familiar with this system, it is recommended to stop the vehicle in a safe place and refer to the commands displayed in the Voice Help menu (a list of the words you can speak). When your vehicle is parked with the parking brake on, press the **TALK (or VOICE)** button or touch **VOICE** icon to display a list of available voice commands (Voice Help menu). Display of the Voice Help menu can be turned on/off with "**Voice Recog.Help**" in the Settings menu.



Voice Help

VOICE icon

Current page



When voice command is possible



When voice command is not accepted

- ⌚ When you are used to voice operation features and no longer need Voice Help, you can turn it off → Page 52

### Scrolling through the Voice Help Menu

Scroll through the remaining commands using  $\Delta$  or  $\nabla$ . You can also display the commands by saying the words "Next Page" (or "Previous Page").

- ☐ If you want to listen to the message of the Navigation System, say "Repeat".
- ☐ If you want to return to the previous screen, say "Back".

### To cancel voice operation

You can cancel voice operation features at any time by pressing the **NAVI (or POS)** button on the Navigation System. After you cancel voice operation, the map is displayed.

- ☐ If the system fails to recognize the command you speak, press the **TALK (or VOICE)** button or touch **VOICE** icon or say "Next option" and other operable commands will be displayed. If you then press the **TALK (or VOICE)** button or touch **VOICE** icon within 3 seconds, yet more commands are shown. Repeat this until the command you want to use is shown.
- ☐ If there are too many items to list, "1/\*\*" is displayed.
- ☐ Depending on the operating state of the navigation system, some commands displayed in Voice Help may be unavailable.

- ☐ If no command is made in the next 6 seconds, voice recognition is canceled and the Navigation System is on hold until the next operation. Press the **TALK (or VOICE)** button or touch **VOICE** icon to reactivate voice operation.

### Operating by only voice when the Navigation System is started

Turning on "Auto Voice Recognition" in the Settings menu allows all settings to be implemented by voice from after the navigation system is turned on and until the route is set (applies only if the route is not yet set).

- ☐ If you press the **TALK (or VOICE)** button on the remote control during voice operation, voice operation mode is canceled.

## Voice Commands

### Common commands

Next Page, Previous Page, Back, Repeat, Next Option

### Commands for display change

Displaying the navigation screen: Display NAVIGATION

Displaying the Audio screen: Display AV

### Available voice commands related to navigation

You can say the following commands:

- ☐ Give the following verbal commands after switching to the navigation screen.

### Specifying your destination

New Destination, Address Book, Return Home, <Registered name>, <POI category name>

- ☐ For the Address Book, <Registered name>, and <POI category name>, only the commands displayed in Voice Help can be used.
- ☐ When you input a telephone number by voice, only numbers in data can be recognized.
- ☐ You cannot search for telephone numbers of registered locations.

## Operating the route being guided

Rerouting, XX mi/km detour, Cancel Route, Cancel Way Point, Route Profile, Use/Avoid Freeway, Use/Avoid Ferry, Use/Avoid Tollroad, Fastest Route, Shortest Route

## Changing map display

Street Map Scale, City Map Scale, Region Map Scale, Zoom IN, Zoom Out, Driver's View, Map View, Route View, Guide View, Overlay POI, Cancel Overlay POI

## Available voice commands related to audio

- The commands you can give verbally depend on the source being switched.
- Some commands may be canceled according to the condition of audio unit being combined.
- Some commands do not operate depending on the connected AV Head Unit or Display.

## Common commands for Audio operations

Multi CD, Radio, Source by NAVI, DVD Changer, Monitor DVD, DVD, XM Radio, TV Tuner, Video In, Auxiliary, Source On, Source Off

### For TUNER source

Preset 1-6, Band Change, Seek Up/Down

### For Multi-CD (M-CD) source

Track 1-20, Random Play, Disc 1-12, ITS Play, Next Disc, Previous Disc

### For XM source

Preset 1-6, Band Change

### For TV source

Preset 1-12, Seek Up/Down, Band Change

### For S-DVD (M-DVD) source

Disc 1-6, ITS Play, Random Play, Next Disc, Previous Disc

### For NAVI source

Track 1-20, Repeat Play, Random Play

## An Example of Voice Operation

In this example, you want to search for the nearest gas station. When presented with a list of search options, you say the number to the left of the option you want to select.

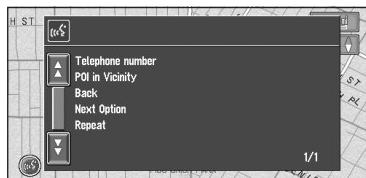
- Give the following verbal commands after switching to the navigation screen.
- Voice commands related to Navigation → Page 54

### 1 Press the TALK (or VOICE) button or touch VOICE icon.

A list of commands for voice operation appears. After the message, the beep indicates that the system is ready to accept your voice command. You say a command after this beep.

### 2 Say "New Destination".

A message to prompt the next operation is given.



- Uttering <POI category name> using this procedure starts a vicinity search in that category. In this case, proceed to step 6.

### 3 Say "POI in Vicinity".

You say the contents you want to operate. Here, selection method of your destination is specified. When you want to search the gas station nearest to the current location, say "POI in Vicinity".

**4 Say "GAS Station".**

Displays the name of a major gas station group.

**5 Say "All Categories".**

The map of the nearest gas station is shown. The message, "Would you like to stop by?" follows.

**6 After confirming the location, say "Yes".**

With the location shown on the map set as the destination (or way point), the route calculation starts.

- If you want to see maps with other options, at Step 6 say "Next" (or "Previous").
- If you say "No", the map of that place can be displayed.
- ⌚ Searching the destination by map → Page 27

**Tips for Voice Operation**

For your voice commands to be correctly recognized and interpreted, ensure that conditions are suitable for recognition.

**Reduce the volume setting on your vehicle audio system**

- ⌚ The sound volume is automatically reduced during voice operation → Page 51
- ⌚ If your Pioneer Head Unit has a Mute lead, the sound volume of the Head Unit is automatically reduced during voice operation → Page 51
- Some Pioneer Head Unit models have a Mute control function.
- ⌚ "About AV Head Units /Displays to be Connected" → Page 59

**Close the vehicle windows**

Please note that wind through the vehicle window or miscellaneous noise from outside the vehicle can interfere with voice operation.

**Position the microphone carefully**

For optimum pick-up, the microphone should be fixed at a suitable distance directly in front of the driver.

**Pause before giving a command**

Speaking too soon may cause the recognition to fail.

**Pronounce your commands carefully**

Speak slowly, deliberately and clearly.

# Appendix

## Appendix

## Installing the Program

The program is installed to the Navigation System using the application disc.

### This is not necessary if your dealer already performed the installation.

When installing the program, you carry out the following operations. When all the setup procedures are completed, you can use the Navigation System.

- 1 Turn on the ignition and start the engine.



- 2 Make sure you are stationary and in a safe location, and that the parking brake is applied.



- 3 Insert the disc.



- 4 Select the language used for the Navigation System.



- 5 Setting the clock.

### CAUTION

- You cannot go back to the previous (pre-upgrade) version of the application after the software upgrade is completed. Also, the map discs that were previously used cannot be used. Instead, use the CNDV-50MT [CNDV-50MTP] DVDs as your new map discs.

- 1 Park your vehicle in a safe place.

Leave the engine on, and make sure that the parking brake is on.

- 2 Insert the Pioneer DVD Map disc to the disc loading slot of the Navigation System.

When upgrading, installation of the version upgrade program starts immediately.

### CAUTION

- Once the installation of the program starts, do not cut off the power supply for the navigation system (or turn the ignition switch to ACC OFF) until the installation is completed and the map of your surroundings or Audio screen appears.

- 3 Press the NAVI/AV button to change the navigation screen.

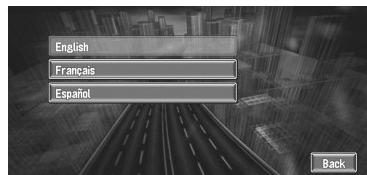
- 4 Touch "Yes/Oui".

When you start the navigation unit for the first time, you will see a confirmation message asking if you wish to select another language. English is the default language of the Navigation System. If desired, you can select another language as shown.

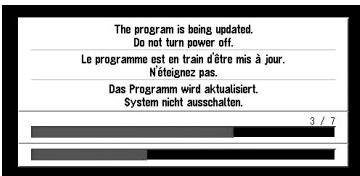
- To keep English, touch "No/Non". After this, proceed to Step 7.
- When you want to select another language, touch "Yes/Oui", and proceed to the next step.

- 5 Select the language from the list.

Touch the language you want to use.



Installation of the program, in the language you chose, begins.



When the installation is complete, the opening display appears.



## 6 Press the NAVI/AV button to change the navigation screen.

Some time is needed until navigation is ready.

## 7 Check the details of the cautionary message and touch "OK".

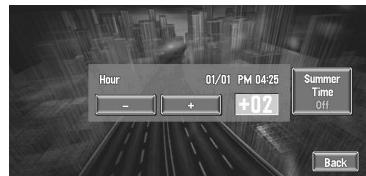
## 8 To set the time difference, touch "+" or "-".



The time difference between the time originally set in the navigation system (Pacific Standard Time) and the current location of your vehicle is shown. If necessary, adjust the time difference. Touching "+" or "-" changes the time difference display in one-hour increments. The time difference can be set from +3 to -3 hours.

## 9 If necessary, set to summer time.

Daylight Saving Time (DST) is off by default. Touch "**Summer Time**" to change the time if you are in the daylight saving period. This turns the display below DST "**On**".



## 10 To complete the setting, touch "Back".



The map of your surroundings appears.

This completes the setup of your Navigation System. Chapter 1 explains the basic operation of your Navigation System.

- To change the language and time later → Page 51

## Combining and Using Pioneer AV Equipment

## To Ensure Safe Driving

### WARNING

- To avoid the risk of an accident and the potential violation of applicable laws, the navigation system is not for use with a video screen that is visible to the driver.
- In some countries or states the viewing of images on a display inside a vehicle even by persons other than the driver may be illegal. Where such regulations apply, they must be obeyed.

## About AV Head Units /Displays to be Connected

**You need an AV head Unit or Display with a touch panel feature to use this software.** If a display that does not have a touch panel feature is connected, the software will not function properly. This includes Pioneer displays that do not have touch panel features. Make sure to use a display suitable for the system. For details, consult a dealer or product catalog.

### Group 1 – AV Head Unit

The type of the unit that can be a control master with the following features (e.g. AVH-P7600DVD, AVH-P5700DVD, AVH-P6600DVD, AVH-P6500DVD, and AVH-P7500DVD):

### Features available to each Group

	Group 1	Group 2	Group 3	
			Master	Slave
“Touch Panel Operation When Using NAVI Source” (→ Page 60)	X	-		X
<b>Map Display</b>				
• AV Guide Mode (→ Page 50)	X	-		X
• Arrow in AV (→ Page 50)	X	-		X
<b>Mute Setting</b>				
• Voice Recognition (→ Page 51)	X *1	X *1		X *2
• Voice Guidance (→ Page 51)	X *1	X *1		X *2
“Common commands for Audio operations” (→ Page 55)	X	-	X	- *3

\*1: The AV Head Unit or Display must be set to Mute or ATT while the Guidance is being performed by the Navigation System.

\*2: Available when the GUIDE ON lead of the Navigation System is connected to the Pioneer Head Unit.

\*3: Recognizable commands are Source On, Source Off, Display AV, Display Navi, Navigation Audio, Next page, Previous page, Repeat, and Back.

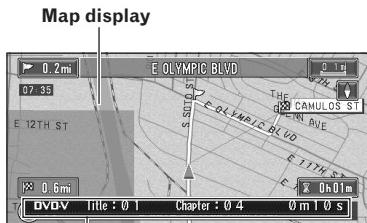
## Characteristics of the Navigation System when combined with Pioneer AV Head Unit or AV System Display

When the navigation system is combined with a Pioneer AV Head Unit or AV System Display, you can use the Navigation screen to confirm information on the audio equipment being played or you can use the Audio Operation screen of the Pioneer AV Head Unit or AV System Display to confirm route guidance information. Also, you can use the Pioneer AV Head Unit or AV System Display to select the built-in DVD player of the Navigation System as a "NAVI Source". (Navigation unit that cannot play DVD-Videos or CDs on the built-in DVD-ROM drive cannot be selected as a source.)

When you approach an intersection with the Audio Operation screen displayed, an enlarged map of the intersection appears. When you have passed through the intersection, the display reverts to the Audio Operation screen.

- ▷ You can also operate audio equipment by voice → Chapter 5

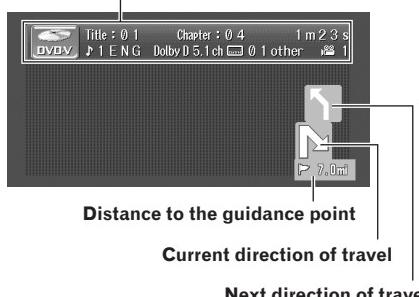
### (example) Navigation screen



Information of AV being played

### (example) Arrow display on CD screen

Information of AV being played



- If you want to operate the Navigation System while the enlarged intersection map is displayed, press the **NAVI/AV** button on the display to switch to the navigation map.
- When pushing the **NAVI/AV** button with the map disc inside the Navigation unit, the NAVI source screen may show "DISC DATA READING" or may be blank.
- The Arrow display or enlarged intersection map display can be turned on or off → Page 50
- ▷ NAVI Source → "Switching the source" of the Pioneer AV Head Unit or AV System Display combined with the navigation system.
- For the connection methods → see the installation manuals of AV equipment and your navigation unit, or consult the shop or dealer where you purchased the navigation system.

• •

### When resetting AV Head Unit or AV System Display

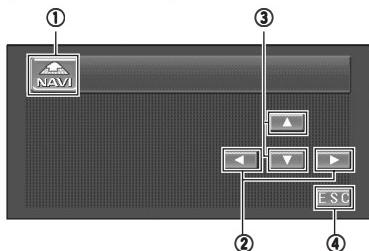
When pressing the reset button of AV Head Unit or AV System Display while Navigation System and AV Head Unit or AV System Display are combined, make sure that ACC (ignition) is tuned OFF. If the reset button is pressed while ACC (ignition) is ON, it may not work properly.

• •

## Touch Panel Operation When Using NAVI Source

When the system is combined with the Pioneer AV Head Unit or AV System Display, if you use

the built-in DVD player to play a DVD-Video or CD when using the NAVI Source, the operation buttons are displayed on the screen and a few limited operations can be performed.



(e.g. When AVH-P5700DVD is connected)

- ① **Switching the source**
- ② **During DVD playback : Forwarding/rewinding the chapter.  
During CD playback : Forwarding/rewinding the track.**
- ③ **For future use.**
- ④ **Canceling the operation buttons.**

## Cautions when connecting a Rear Display to the Front Display

The map screen navigation images output to the rear display differ from standard NTSC format images. Therefore, their quality will be inferior to the images that appear on the front display.

- ▷ Switching the rear display → the manual for the display you are combining.

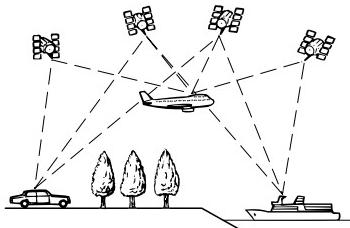
## Positioning Technology

The Navigation System accurately measures your current location by combining the positioning by GPS and by Dead Reckoning.

### Positioning by GPS

The Global Positioning System (GPS) uses a network of satellites orbiting the Earth. Each of the satellites, which orbit at a height of 68,900,000 feet (21,000 km), continually broadcasts radio signals giving time and position information. This ensures that signals from at least three can be picked up from any open area on the earth's surface.

The accuracy of the GPS information depends on how good the reception is. When the signals are strong and reception is good, GPS can determine latitude, longitude, and altitude for accurate positioning in three dimensions. But if signal quality is poor, only two dimensions, latitude and longitude, can be obtained and positioning errors are somewhat greater.



### Positioning by dead reckoning

The 3D Hybrid Sensor in the main unit also calculates your position. The current location is measured by detecting driving distance with the speed pulse, the turning direction with the Gyrosensor, and inclination of the road with the G sensor.

The 3D Hybrid Sensor can even calculate changes of altitude, and corrects for discrepancies in the distance traveled caused by driving along winding roads or up slopes. Also, the Navigation System learns the driving conditions and stores information in the memory; thus, as you drive more, the precision of the positioning becomes more accurate.

The method of positioning changes as follows depending on whether the speed pulse of your vehicle is detected or not:

#### 3D hybrid mode

This is active when the speed pulse is detected. Inclination of a road can be detected.

## Simple hybrid mode

When the speed pulse is not detected, positioning is performed in this mode. Only horizontal movement is detected, so it becomes less accurate. Also, when the positioning by GPS is not available, such as when your vehicle enters a long tunnel, the discrepancy between your actual and calculated position may become bigger.

- The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

## How do GPS and dead reckoning work together?

For maximum accuracy, your Navigation System continually compares GPS data with your estimated position as calculated from the data of 3D Hybrid Sensor. However, if only the data from the 3D Hybrid Sensor is available for a long period, positioning errors are gradually compounded until the estimated position becomes unreliable. For this reason, whenever GPS signals are available, they are matched with the data of the 3D Hybrid Sensor and used to correct it for improved accuracy.

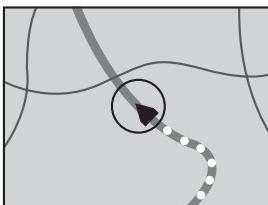
To ensure maximum accuracy, the dead reckoning system learns with experience. By comparing the position it estimates with your actual position as obtained using GPS, it can correct for various types of error, such as tire wear and the rolling motion of your vehicle. As you drive, the dead reckoning system gradually gathers more data, learns more, and the accuracy of its estimates gradually increases. So, after you have driven some distance, you can expect your position as shown on the map to show fewer errors.

- If you use chains on your wheels for winter driving, or if you put on the spare wheel, the errors may appear to suddenly increase because of the increased wheel diameter. The system detects the fact that the tire diameter has changed, and automatically replaces the value for calculating distance.

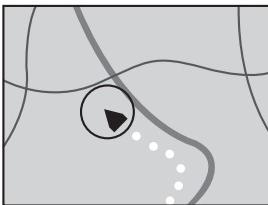
- If the ND-PG1 is used or if your vehicle is operating in Simple hybrid mode, the distance calculation value cannot be replaced automatically.

## Map matching

As mentioned, the GPS and dead reckoning systems used by this Navigation System are susceptible to certain errors. Their calculations may, on occasion, place you in a location on the map where no road exists. In this situation, the processing system understands that vehicles travel only on roads, and can correct your position by adjusting it to a nearby road. This is called map matching.



**With map matching**



**Without map matching**

## Handling Large Errors

Positioning errors are kept to a minimum by combining GPS, Dead Reckoning, and map matching. However, in some situations, these functions may not work properly, and the error may become bigger.

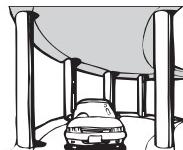
## When the positioning by GPS is impossible

- If signals cannot be received from more than two GPS satellites, GPS positioning does not take place.
- In some driving conditions, signals from GPS satellites may not reach your vehicle. In this

case, it is impossible for the system to use GPS positioning.



**In tunnels or enclosed parking garages**



**Under elevated roads or similar**



**When driving among high buildings**



**When driving through a dense forest or tall trees**

- If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.
- Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals, so keep the antenna clear.
- If, for any reason, GPS signals cannot be received, learning and error correction are not possible. If GPS positioning has been operating for only a short time, your vehicle's actual position and the current location mark on the map may diverge considerably. Once GPS reception is restored, accuracy will be recovered.

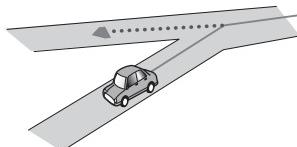
## **Vehicles that Cannot Obtain Speed Pulse Data**

- The speed pulse data comes from the speed sensing circuit. The location of this speed sensing circuit depends on your vehicle model. In some cases, it is impossible to make a connection to it, and in such a case we recommend that the ND-PG1 speed pulse generator (sold separately) be used.

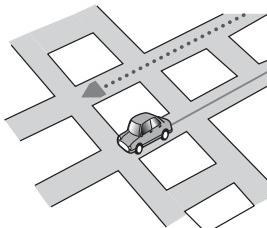
## **Conditions Likely to Cause Noticeable Positioning Errors**

For various reasons such as the state of the road you are traveling on and the state of reception of the GPS signal, the actual position of your vehicle may differ from the position displayed on the map screen.

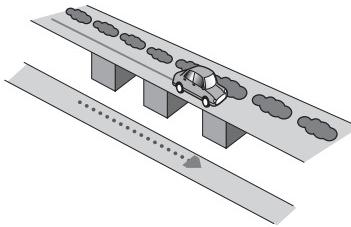
- If you make a shallow turn.



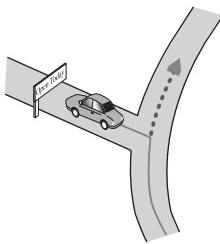
- If there is a parallel road.



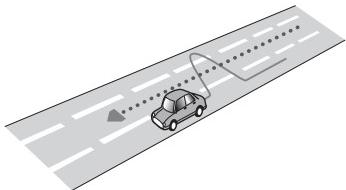
- If there is another road very nearby, such as in the case of an elevated freeway.



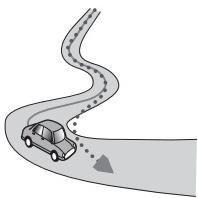
- If you take a recently opened road that is not on the map.



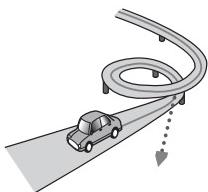
- If you drive in zig-zags.



- If the road has connected hairpin bends.



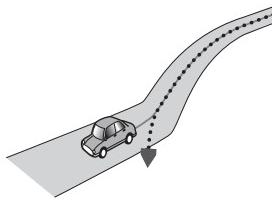
- If there is a loop or similar road configuration.



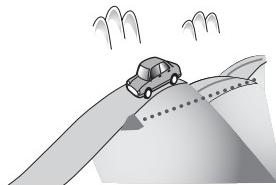
- If you take a ferry.



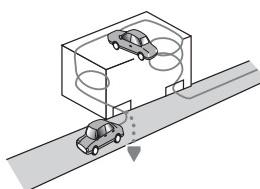
- If you are driving on a long, straight road or a gently curving road.



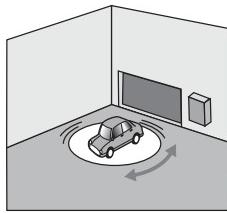
- If you are on a steep mountain road with many height changes.



- If you enter or exit a multi-storey parking lot or similar using a spiral ramp.



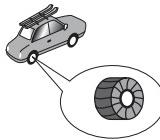
- If your vehicle is turned on a turntable or similar.



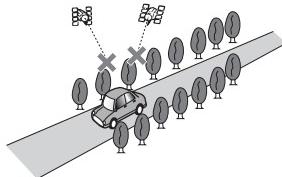
- If your vehicle's wheels spin, such as on a gravel road or in snow.



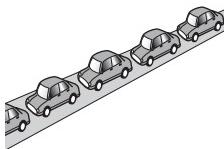
- If you put on chains, or change your tires for some of a different size.



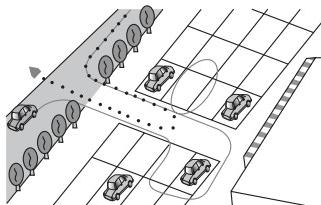
- If trees or other obstacles block the GPS signals for a considerable period.



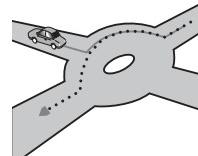
- If you drive very slowly, or in a start-and-stop manner, as in a traffic jam.



- If you join the road after driving around a large parking lot.



- When you pass around a traffic circle.



- When starting driving immediately after starting the engine
- If you insert the disc and turn your Navigation System on while driving

Some types of vehicle may not output a speed signal while driving at just a few kilometers per hour. In such a case, the current location of your

vehicle may not be displayed correctly while in a traffic jam or in a parking lot.

## About the Data being Deleted

The following items are erased by pushing the **RESET** button or disconnect yellow lead from battery (or remove the battery itself).

- Item set in the SET-UP MENU of the built-in DVD drive (AVIC-9DVD, AVIC-90DVD only)
- Background picture setting
- Tracking

## Limitation of Functions for Areas not Stored on the Disc

For areas not stored on the disc (unrecorded areas), the functions will operate as follows:

- ▷ Inoperable buttons for unrecorded areas →  
Page 21

### Displaying the map

- Maps with a scale of between 0.02 mi and 0.25 mi cannot be displayed. (If the scale was set to between 0.02 mi and 0.25 mi, it is automatically switched to 0.5 mi.)
- When driving with **Guide View**, **Route View** or **Driver's View**, upon entering an unrecorded area the display automatically switches to **Map View**. (When the vehicle re-enters an area stored on the disc, the display returns to the previous map mode except for **Driver's View**.)

### Destination search

- You cannot search a destination in an unrecorded area using **Address Search**, **POI Search**, or **Telephone Search**. (In case of the POI search, only "City Center" search is possible.)
- If you cannot search in a currently selected zone, the system may forcibly switch to the zone selection screen.
- A **Freeway Search** covers all areas, regardless of the disc on which the information is recorded.
- If a **Vicinity Search** is performed on the border of an unrecorded area, the system will not necessarily select the nearest facility. (The search will take place only within the range of areas recorded on the disc.)

## Guidance

- When your vehicle approaches an unrecorded area, you will be notified three times: when the distance to the unrecorded area is 12 mi (20 km), 6 mi (10 km) and 3 mi (5 km) respectively. When your vehicle enters the unrecorded area, a caution is given.
- In the unrecorded area, only guidance for reaching the destination is provided. No other guidance is given.
- If a route calculation is operated within an unrecorded area, the route might not be set from the streets you are currently driving. Also, if you set the destination in an unrecorded area of the disc, the system may not be able to set the route up to the destination.
- If the vehicle deviates from the set route in an unrecorded area, the Auto Reroute function will not work.
- Even if "**Close-up of Junction**" is "**On**", the display will not switch to an enlarged map of the intersection.
- The arrow indicating the traveling direction will not be displayed in the Audio screen.

## Route information

- If the set route goes through an unrecorded area, no route profile for the unrecorded area will be displayed. (If the set route traverses both an unrecorded area and area stored on the disc, only the route profile within the recorded area will be displayed.)
- Route scrolling for an unrecorded area is possible only with a map scale of 0.5 mi or above.

## Other function limitations

### Overlay POI

- **Overlay POI** is not available in an unrecorded area.

### Avoid area

- An area not stored on the disc cannot be set as an Area to Avoid.
- A set Area to Avoid may be deleted when the software is updated. If this happens, the system will automatically try to recover the deleted information, but data can be recovered only for areas stored on the disc. For items that could not be recovered, a recovery process will begin when you set another disc.

# Troubleshooting

If you have problems operating your Navigation System, refer to this section. The most common problems are listed below, along with likely causes and solutions. While this list is not comprehensive, it should answer your most common problems. If a solution to your problem cannot be found here, contact your dealer or the nearest authorized Pioneer service facility.

## Problems in the Navigation screen

Symptom	Cause	Action (See)
Power doesn't turn on. The unit doesn't operate.	Leads and connectors are incorrectly connected.  The fuse is blown.	Confirm once more that all connections are correct.  Rectify the reason for the fuse blowing, then replace the fuse. Be very sure to install the correct fuse with the same rate.
You cannot position your vehicle on the map or the positioning error is large.	The quality of signals from the GPS satellites is poor, causing reduced positioning accuracy. Such a loss of signal quality may happen for the following reasons: <ul style="list-style-type: none"><li>• The GPS antenna is in an unsuitable location.</li><li>• Obstacles are blocking signals from the satellites.</li><li>• The position of satellites relative to your vehicle is bad.</li><li>• Signals from the GPS satellites have been modified to reduce accuracy. (GPS satellites are operated by the US Department of Defense, and the US government reserves the right to distort positioning data for military reasons. This may lead to greater positioning errors.)</li><li>• If a vehicle phone or cellular phone is used near the GPS antenna, GPS reception may be lost temporarily.</li><li>• Do not cover the GPS antenna with spray paint or vehicle wax, because this may block the reception of GPS signals. Snow buildup can also degrade the signals.</li></ul>	Check the GPS signal reception (→ Page 47) and the position of the GPS antenna if necessary, or continue driving until reception improves. Keep the antenna clear.
	Signals from the vehicle's speed pulse are not being picked up properly.	Check that the cables are properly connected. If necessary, consult the dealer that installed the system.
	The navigation unit may not be mounted securely in your vehicle.	Check that the navigation unit is securely mounted and, if necessary, consult the dealer that installed the system.
	Your vehicle is operating in Simple hybrid mode.	Connect the speed signal input (pink lead wire) of the power cable correctly, and clear the 3D Hybrid Sensor memory ("Learning Status").
	The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.	Confirm the installation angle. (The navigation system must be installed within +30 degrees to -15 degrees of the horizontal, or within five degrees of your vehicle's direction of travel.)

Symptom	Cause	Action (See)
	Setting of the Installation direction lever is wrong.	Check the installation position of the navigation unit of your Navigation System and the setting of the Installation direction lever (→ "Installation Manual").
	Indication of the position of your vehicle is misaligned after a U-turn or reversing.	Check whether or not the reverse gear signal input lead (purple) is connected properly. (The Navigation System works properly without the lead connected, but positioning accuracy will be adversely affected.)
The map continually reorients itself.	The traveling direction is always set to north.	Touch  on the screen and change the map display.
Tracking marks are not displayed.	The " <b>Tracking Display</b> " is turned off.	Check the " <b>Tracking Display</b> " settings (→ Page 50) and make sure " <b>Always</b> " or " <b>This Trip</b> " is selected.
The daylight display is used even when the vehicle lights are on.	Daytime is selected on " <b>Day/Night Display</b> ".	Check the " <b>Day/Night Display</b> " setting (→ Page 50) and make sure " <b>Nighttime</b> " is selected.
	The Orange/white lead is not connected.	Check the connection.
The system will not switch on or will not operate.	Installation or connection has been carried out incorrectly.	Check with your dealer.
The display is very dim.	The vehicle's light is turned ON, and " <b>Nighttime</b> " is selected on " <b>Day/Night Display</b> ".	Read about the " <b>Day/Night Display</b> " setting (→ Page 50) and, if desired, select " <b>Daytime</b> ".
	The vehicle cabin temperature is extremely low.	A Liquid Crystal Display (LCD) is used, and such displays tend to darken when cold. Wait for the vehicle to warm up.
There is no voice guidance or the volume is low.	The volume setting is low or the speaker lead is disconnected.	Check the volume setting on the display or turn the volume up according to " <b>Hardware Volume</b> " (→ Page 50) and/or turn up the volume on the display.
The remote control fails to work.	Uses a type of remote control that cannot be used with a touch panel system.	This navigation system mainly uses touch panel operation. If you use a remote control, only some of the system's buttons can be used.
	The batteries are low.	Change the batteries.
	The batteries have been inserted incorrectly.	Check that the batteries are properly inserted according to the + and – markings.
	The remote control is pointing at the floor or a seat.	Ensure that the remote control has a clear line of sight to the display unit.
	The signal receptor on the display is exposed to direct sunlight.	Move the remote control closer to the receiver on the display unit.

### When the screen is frozen...

Park your vehicle at a safe place, and cut the engine off. Turn the ignition key back to "Acc off". Then start the engine again, and turn the power to the main unit back on. If this does not solve the problem, press the Reset button on the main unit.

## Messages and how to react to them

The following messages may be displayed by your Navigation System.

- There are occasions when you may see error messages other than those shown here. In such a case, follow the instructions given on the display.

Message	When	What to do
You cannot use this function while driving.	While trying to make a menu selection.	Pull over and come safely to a halt, put the parking brake on, and then try again.
Please insert the appropriate disc.  This is not the appropriate disc. Please insert the appropriate disc.	<ul style="list-style-type: none"><li>If you try to use a disc which is incompatible with this system.</li><li>If you insert a disc upside down.</li><li>If the disc is dirty.</li><li>If the disc is cracked or otherwise damaged.</li></ul>	<ul style="list-style-type: none"><li>Insert a suitable disc.</li><li>Insert the disc with the label upward.</li><li>Clean the disc.</li><li>Insert a normal, round disc.</li></ul>
Irregular speed pulse signal is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press "OK".	If the Navigation unit does not receive the vehicle speed pulse.	Consult your Pioneer dealer.
Speed pulse wire is not connected. System will start to learn without speed pulse. Please keep in mind that accuracy is not fully ensured without speed pulse.	The speed signal input (pink lead wire) of the power cable is not connected.	To operate with 3D hybrid mode, connect the speed signal input (pink lead wire) of the power cable correctly.  Although it can be operated with Simple hybrid mode without connecting the speed signal input, the precision of the positioning will be less accurate.
Vibration is detected. Please power off the system and check the installation. After you have checked, please re-boot the system and press "OK".	While the vehicle is stationary, the Navigation System is installed in a place where the navigation unit may be affected by a large vibration.	Re-install the navigation unit of the Navigation System in a place where the navigation unit will not be affected by vibration.
Direction of G sensor is not correct. Please power off the system and check the installation. After you have checked, please re-boot the system and press "OK".	Direction of G sensor is set incorrectly.	See the "Installation Manual" and set the direction of G sensor correctly.
Gyro Sensor is not working properly. Please consult your dealer or Pioneer service center.	Abnormal output of Gyrosensor is detected.	Note down the error code shown on the screen; turn off the power, and then contact your nearest Pioneer service facility.
System detected that the vertical angle of the installation has been changed. Learning status for Gyro Sensor has been initialized.	In case the mounting angle of the navigation unit is changed.	The system initializes the sensor in order to operate it with the maximum performance and automatically starts re-learning.
System detected that the vertical angle of the installation exceeds the permission level. Please install the navigation unit correctly.	The navigation unit is installed with an extreme angle exceeding the limitation of the installation angle.	Check the installation position of the navigation unit of your Navigation System and the setting of the Installation direction lever (→ "Installation Manual").  Confirm the installation angle. (The navigation system must be installed within +30 degrees to -15 degrees of the horizontal, or within five degrees of your vehicle's direction of travel.)
If time data has been lost it cannot be saved to the PC Card.	If this message is displayed, the built-in battery of the navigation unit might be running out.	<ul style="list-style-type: none"><li>Check that the GPS aerial is correctly connected.</li><li>Consult the Pioneer Local dealer if this message persists.</li></ul>

Message	When	What to do
Route calculation was not possible.	Route calculation has failed because of malfunction of map data, software, hardware, or disc.	<ul style="list-style-type: none"> <li>Change the destination.</li> <li>Clean the disc.</li> <li>Consult the Pioneer Local dealer if this message persists.</li> </ul>
Route calculation was not possible because the destination is too far.	The destination is too far.	<ul style="list-style-type: none"> <li>Set a destination closer to the starting point.</li> <li>Set one or more way points.</li> </ul>
Route calculation was not possible because the destination is too near.	The destination or way point(s) is too close.	Set a destination [and way point(s)] farther from the starting point.
Route calculation was not possible due to traffic regulations.	<ul style="list-style-type: none"> <li>The destination or way point(s) are in a Control Traffic Zone (CTR) and the route calculation is hampered.</li> <li>Your vehicle is currently in a Control Traffic Zone (CTR) and the route calculation is hampered.</li> </ul>	<ul style="list-style-type: none"> <li>Set a destination and way point(s) outside the CTR if you know where the restricted area is.</li> <li>Try the destination or way point(s) away from the currently set points to some extent.</li> <li>Drive your vehicle to an unrestricted area and reset the destination and way point(s).</li> </ul>
Route calculation was not possible because no guidance can be provided around the destination or the starting point.	The destination, way point(s), or starting point are in an area where no road exists (e.g. a mountain) and the route calculation is impossible.	<ul style="list-style-type: none"> <li>Set a destination and way point(s) on roads.</li> <li>Reset the destination after you drive the vehicle to any road.</li> </ul>
There is no route to the destination.	The destination or way point(s) are in an isolated island, etc. without a ferry and the route calculation is impossible.	Change the destination.
The route could not avoid the specified area.	If route setting cannot avoid specified <b>Areas to Avoid</b> .	If the current route is not desired, set destination or way points that do not pass through the <b>Areas to Avoid</b> .
The route could not avoid the specified area. Toll road has not been avoided.	If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas) and <b>Areas to Avoid</b> .	If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas) and <b>Areas to Avoid</b> .
Ferry has not been avoided.	In case a ferry route was included in the route to the destination or way points even though " <b>Avoid Ferry</b> " was set to " <b>On</b> ".	If the current route is not desired, set destination or way points that do not pass through a ferry route.
Toll road has not been avoided.	If the route to the destination (or way point) cannot be established by bypassing toll roads (including toll areas).	If the current route is not desired, set destination or way points that do not pass through toll roads (including toll areas).
The address does not exist. Do you want to continue?	If the house number is entered without specifying City or Street and that house number does not exist on the data.	Re-enter the existing house number by following the instructions shown on the screen. Or, proceed to the next step without entering the house number and specify the City or Street first.
There is no applicable data for the selected city. Automatically returning to list.	If the history data of the City could not be used (for example, in case that the history data of the City that was used in the <b>POI Search</b> cannot be found in the <b>Address Search</b> .)	Once the search is performed to specify the City, the result is saved as a history. The data of the specified City, however, may not be hit by the different search criteria. In this case, try another search method or change the destination.
There is no Freeway in this area.	If no freeway was found in the selected zone.	Set the destination or way points using another search method or change the location of the destination or way points.

Message	When	What to do
This area does not contain any POI's of the selected type.	POI Search cannot be performed because the searched location is in areas not stored on the map disc (unrecorded areas). Facilities of the selected category do not exist in the surrounding areas.	<ul style="list-style-type: none"> <li>Replace the map disc and perform the <b>POI Search</b> again.</li> <li>Use another search method or move to another location and perform the <b>POI Search</b> again.</li> </ul>
Only City Center can be searched.	If POI search was performed on areas not stored on the map disc (unrecorded areas).	Only the City Center can be searched. If you want to search other categories in unrecorded areas, replace the map disc and perform the <b>POI Search</b> again. Set the areas stored on the map disc to destination or way points.
This zone is not available on this disc. Please insert appropriate disc.	When areas not stored on the map disc (unrecorded areas) are included in the search.	Set the destination or way points in the areas stored on the map disc, or replace the map disc and perform the search again.
Failed to make a route profile.	Failed to generate the route profile because the set route passes through areas not stored on the map disc (unrecorded areas).	Insert the map disc and retry.
The maximum number of registrations has been completed. Please clear existing registered items and re-register current item.	If there are already 300 items when you attempt to register an item in the <b>Address Book</b> .	Delete unnecessary data and try to register again.
Memory is full.	When the total 300 registered points are in the PC card and <b>Address Book</b> , you attempt moving an item to the <b>Address Book</b> from PC card.	Delete unnecessary data on the system and try to register again or reduce currently selected items.
Too many records are selected. Please indicate what records that you would like to remove from the memory.	When the total 98 registered points for using voice recognition are in the PC card and <b>Address Book</b> , you attempt moving an item to the <b>Address Book</b> from PC card.	Delete some registered items as appropriate or reduce currently selected items.
Too many records are selected. Please indicate what records that you would like to remove from the memory.	If the number of registered records of the voice recognition reaches or exceeds 98.	Delete some registered items as appropriate.
You can select up to 98 records with voice recognition.	If the number of registered records of the voice recognition reaches or exceeds 98.	Reduce currently selected items.
Irregular character strings. Please input again.	A symbol that cannot be pronounced was entered.	Enter a word that can be pronounced.
There is no /BG/ folder. Please create /BG/ folder and store JPEG files in that Folder.	Cannot load the image because the BG folder is not found in the inserted PC card.	Use the appropriate data after reading "Changing Background Picture" on page 45.
Data read error. Change is cancelled.	Failed to read the data because the PC card is out of specifications. Or, the PC card slot is faulty.	<ul style="list-style-type: none"> <li>Use a PC card that conforms to the specifications. (Refer to Hardware Manual or Operation manual of the navigation system.)</li> <li>Consult the Pioneer Local dealer if this message persists.</li> </ul>
JPEG file is corrupt. Change is cancelled.	The data is damaged or an attempt was made to set a JPEG image, that is out of specifications, as the background picture.	Use the appropriate data after reading "Changing Background Picture" on page 45.
Data Read error. Back to Original Background. Please do not turn power off.	Failed to read the data because the PC card is out of specifications. Or, the PC card slot is faulty.	<ul style="list-style-type: none"> <li>Use a PC card that conforms to the specifications. (Refer to Hardware Manual or Operation manual of the navigation system.)</li> <li>Consult the Pioneer Local dealer if this message persists.</li> </ul>

Message	When	What to do
There are no files available in /BG/ folder.	If the BG folder exists on the PC card but no data in JPEG format exists.	Use the appropriate data after reading "Changing Background Picture" on page 45.
Initialization failed.	If the PC card could not be initialized for any reason.	Use the PC to initialize.
No map data available on this scale. Scaling up.	When the scale that had been displayed could not be displayed because the map was scrolled to areas not stored on the map disc (unrecorded areas) or the vehicle moved to areas not stored on the map disc (unrecorded areas).	If the desired scale cannot be selected, insert the map disc that contains that area and then change the scale.
This function is not available with the current map disc.	In case the current position is "areas not stored on the map disc (unrecorded areas)" and an attempt was made to zoom in to make the scale 0.5 mile or more.	Zoom in again after the vehicle moves into an area stored on the map disc. Or, replace the map disc and try to zoom in again.
DISC DATA READING	With the map disc inside the Navigation unit, the NAVI source screen has been displayed by pressing the <b>NAVI/AV</b> button.	Select any other source besides NAVI source, or press the <b>NAVI/AV</b> button to switch to the Navigation map.
NON-PLAYABLE DISC	If you insert a disc upside down.	Insert the disc with the label upward.

If a message about the PC card is displayed

- If there is no more space on the PC card or 300 items of data are already stored in one group, either delete unnecessary data or create a new group.
  - If the data read from the PC card combined with the data registered in the **Address Book** exceeds 300 items, either delete unnecessary data or reduce the amount of data read from the PC card.

# Route Setting Information

## Route search specifications

Your Navigation System sets a route to your destination by applying certain built-in rules to the map data. This section provides some useful information about how a route is set.

### ▲ CAUTION

- **When a route is calculated, the route and voice guidance for the route is automatically set. Also, for day or time traffic regulations, only information about traffic regulations at the time when the route was calculated is shown. One-way streets and street closures may not be taken into consideration. For example, if a street is open during the morning only, but you arrive later, it would be against the traffic regulations so you cannot drive along the set route. When driving, please follow the actual traffic signs. Also, the system may not know some traffic regulations.**
- **Update Navigation DVDs are available for purchase from your local Pioneer dealer that includes the most current map and point of interest information. Contact your local Pioneer dealer for details.**

### About the route condition

When the calculation of only one route is set, you can search a route option by combining the following conditions.

- ▷ How to set the calculation conditions →  
Page 32

For example, when “**Fastest**” and “**Avoid Freeway**” (“**On**”) are combined, the route, which avoids freeway, and has the shortest travel time, will be calculated and displayed on the screen.

### Condition 1 :whether to put priority on the distance, or time

#### Shortest :

Calculate a route with the shortest distance to your destination as a priority.

#### Fastest :

Calculate a route with the shortest travel time to your destination as a priority.

### Condition 2 :whether to use freeway or not

#### Avoid Freeway :

Calculate a route that avoids freeway. (A route using the freeway may be set if your destination is far away.)

- The system assumes the driver deviated either intentionally or inadvertently from the route and searches for another route (intelligent rerouting). Depending on the situation, the system may search a new route that does not return to the original one.
- The calculated route is one example of the route to your destination decided by the Navigation System whilst taking the type of streets or traffic regulations into account. It is not necessarily an optimum route. (In some cases, you may not be able to set the streets you want to pass. If you want to pass a certain street, set the way point on that street.)
- The route set by your Navigation System is based on the assumption that the driver does not know the area. Thus, the streets known to local drivers, such as small streets or special roads, may not be used for the set route.
- Some route options may become the same route. If visiting points are set, or the route is set by voice operation, only one route is calculated.
- Route setting is limited to the range of the disc in use.
- When the destination is too far, there may be instances where the route cannot be set. (If you want to set a long-distance route going across several areas, set way points along the way.)
- During voice guidance, turns and junctions from the freeway are announced. However, if you pass junctions, turns, and other guide points in rapid succession, some may not be announced.
- It is possible that guidance may direct you off a freeway and then back on again.
- In some cases, the set route may require you to travel in the opposite direction to your current heading. In such cases, you are instructed to turn around, so please turn around safely by following the actual traffic rules.

- In some cases, guidance may direct you past your destination and then indicate a U-turn to get back to it.
- In some cases, a route may begin on the opposite side of a railway or river from your actual current location. If this happens, drive towards your destination for a while, and try route calculation again.
- In the following cases, the route that passes through an Area to Avoid may be set:
  - when your vehicle is in the Area to Avoid
  - when your destination or way points are in the Area to Avoid
  - when it is not possible to avoid doing so
- If a suitable route cannot be set in compliance with the specified "Detour" distance, or your preference to avoid freeways, toll roads, ferry route, the setting or parameter may be ignored.
- There may be instances when the starting point and the destination point are not on the highlighted route.
- The number of traffic circle exits displayed on the screen may differ from the actual number of roads.

## Auto Reroute

- Auto Reroute function will work when you deviate more than 0.01 mi (30 m) from your route.
- Auto Reroute function does not work in the following cases:
  - when you are too close to your destination
  - when your vehicle is not on a street
  - when your vehicle is on a ferry
  - when driving on a road inside a facility
  - when driving on a traffic circle
  - when driving on the routes are described in "Roads not Used in Calculations"

## Route highlighting

- Once set, the route is highlighted in bright green or light blue on the map.
- The immediate vicinity of your starting point and destination may not be highlighted, and neither will areas with particularly complex road layouts. Consequently, the route may appear to be cut off on the display, but voice guidance will continue.

## Roads not Used in Calculations

Even though displayed onscreen, the following roads are not included in route calculations.

- Stubble Road
- Walk Way
- Public vehicle only
- Non routable road

## Intersection enlargement

- When "**Close-up of Junction**" is on, the map scale increases to show more detail as you approach an intersection.
- If the intersection is approached in a gentle curve, the map displayed may differ from the actual road layout.

## Tracking

- Your Navigation System marks your course on the map in certain increments. This is called tracking. It is handy when you want to check a route traveled without guidance or if returning along a complex route.
- A maximum of about 145 miles (230 km) is marked and, as you travel beyond this limit, tracking marks are erased in order from the most distant. Tracking display shows about 100 miles tracking of your vehicle with white dots.
- ⇒ Tracking can also be set for automatic erasing whenever the Navigation System is switched off → Page 50

## Types of the Road Stored in the Disc

There are three types of roads in the map of this disc.

### Roads included in the Route Guidance and roads not Included

**Turn by Turn Routable Roads** contain full attribute data and can be used for full Route Guidance. Pioneer Navigation will display full route guidance, including turn-by-turn voice directions and arrow icons.

**Routable Roads (The Route displayed and highlighted in Purple Color)** have only basic data and can only be used to plot a navigable route. Pioneer Navigation will only display a navigable route on the map (only the arrival guidance for the destination or a way point is available). Please review and obey all local traffic rules along the highlighted route. (For your safety.) No turn-by-turn directions or arrow icons will be displayed on these roads. When your vehicle reaches to the entrance of this road, the icon  will be displayed, indicating that the guidance is not available with this type of road. The icon  will be indicated for the road with which the guidance is available. The Close-up of intersection function, Auto Reroute function, Changing the view to Guide View, or Route View are not available.

### Non routable roads (pink color road)

Map display is possible, but it cannot be used for the route calculation. Please review and obey all local traffic rules along this route. (For your safety.)

## Glossary

This glossary explains some of the terms used in the manual.

### 3D Hybrid sensor

The built-in sensor which enables the system to estimate your vehicle's position. A learning function increases its accuracy and its learning data can be stored in memory.

### Address Book

A list of previously searched destinations, way points and locations registered manually.

### Current location

The present location of your vehicle; your current location is shown on the map by a red triangle mark.

### Default setting

A factory setting which applies when you first switch on the system; you can change default settings to suit your own needs in the Route Options menu or the Settings menu.

### Destination

A location you choose as the end point of your journey.

### Favorite location

A frequently visited location (such as your workplace or a relative's home) that you can register to allow easy routing.

### GPS

Global Positioning System. A network of satellites that provides navigation signals for a variety of purposes.

### Guidance mode

The mode in which guidance is given as you drive to your destination; the system automatically switches to this mode as soon as a route has been set.

### Guidance point

These are important landmarks along your route, generally intersections. The next way point along your route is indicated on the map by the yellow flag icon.

### Home location

Your registered home location.

### Menu

A list of options shown on the display; choices can be selected touching the display.

### Navigation map disc

This DVD-ROM disc contains Pioneer navigation software. Map data is also recorded on the disc.

## **PC card**

Card-type peripheral equipment mainly used for personal computers. The Navigation System can use a memory card to store data.

## **Point of Interest (POI)**

Point Of Interest; any of a range of locations stored in the data, such as railway stations, shops, restaurants, and amusement parks.

## **Region number**

DVD players and DVD discs feature region numbers indicating the area in which they were purchased. Playback of a DVD is not possible unless it features the same region number as the DVD player.

## **Remote Control**

The remote control unit for the system (→ Chapter 1 of the "Hardware Manual").

## **Route setting**

The process of determining the ideal route to a specific location; route setting is done automatically by the system when you specify a destination.

## **Set route**

The route marked out by the system to your destination. It is highlighted in bright green on the map.

## **Tracking**

Marks on the map indicating the route you have traveled.

## **Voice guidance**

The giving of directions by a recorded voice while in guidance mode.

## **Voice recognition**

The technology that allows the system to understand the driver's voice commands.

## **Way Point**

A location that you choose to visit before your destination; a journey can be built up from multiple way points and the destination.

# Display Information

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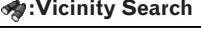
### Information

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## **PIONEER CORPORATION**

4-1, MEGURO 1-CHOME, MEGURO-KU, TOKYO 153-8654, JAPAN

## **PIONEER ELECTRONICS (USA) INC.**

P.O. Box 1540, Long Beach, California 90801-1540, U.S.A.

TEL: (800) 421-1404

## **PIONEER EUROPE NV**

Haven 1087, Keetberglaan 1, B-9120 Melsele, Belgium

TEL: (0) 3/570.05.11

## **PIONEER ELECTRONICS ASIACENTRE PTE. LTD.**

253 Alexandra Road, #04-01, Singapore 159936

TEL: 65-6472-7555

## **PIONEER ELECTRONICS AUSTRALIA PTY. LTD.**

178-184 Boundary Road, Braeside, Victoria 3195, Australia

TEL: (03) 9586-6300

## **PIONEER ELECTRONICS OF CANADA, INC.**

300 Allstate Parkway, Markham, Ontario L3R OP2, Canada

TEL: 1-877-283-5901

## **PIONEER ELECTRONICS DE MEXICO, S.A. de C.V.**

Blvd.Manuel Avila Camacho 138 10 piso

Col.Lomas de Chapultepec, Mexico, D.F. 11000

TEL:55-9178-4270

先鋒股份有限公司

總公司：台北市中山北路二段44號13樓

電話：(02) 2521-3588

先鋒電子（香港）有限公司

香港九龍尖沙咀海港城世界商業中心9樓901-6室

電話：(0852) 2848-6488

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